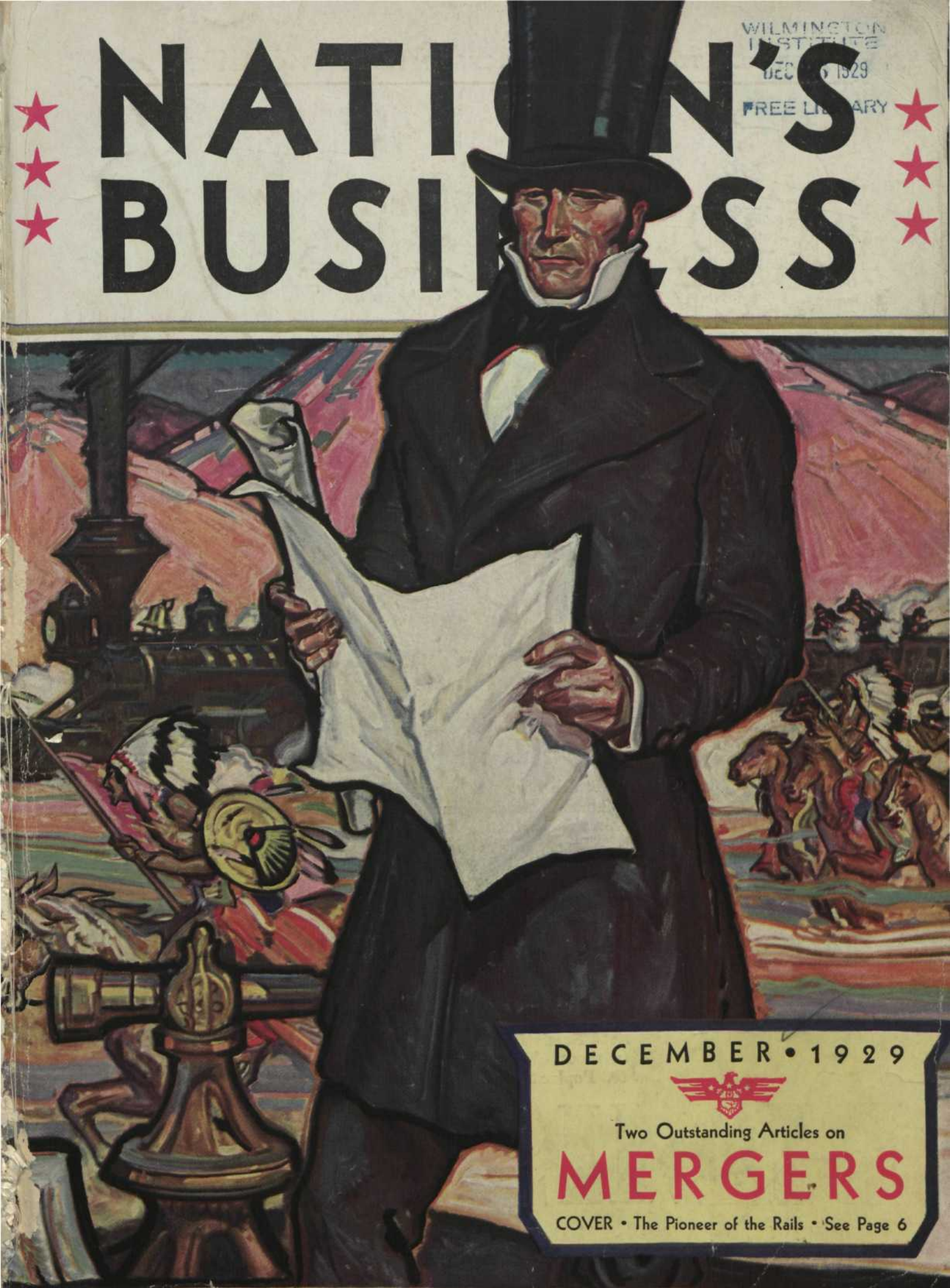
NATION'S BUSINESS

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MERGERS

COVER • The Pioneer of the Rails • See Page 6

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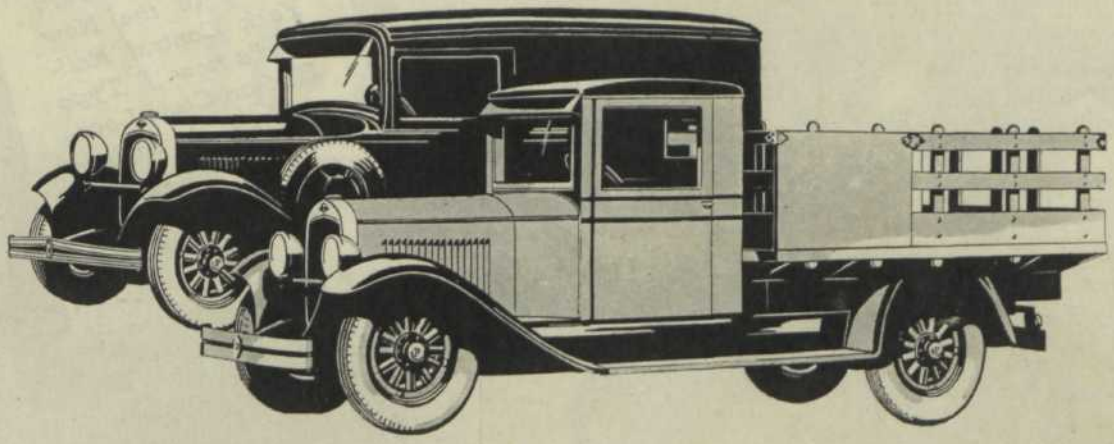
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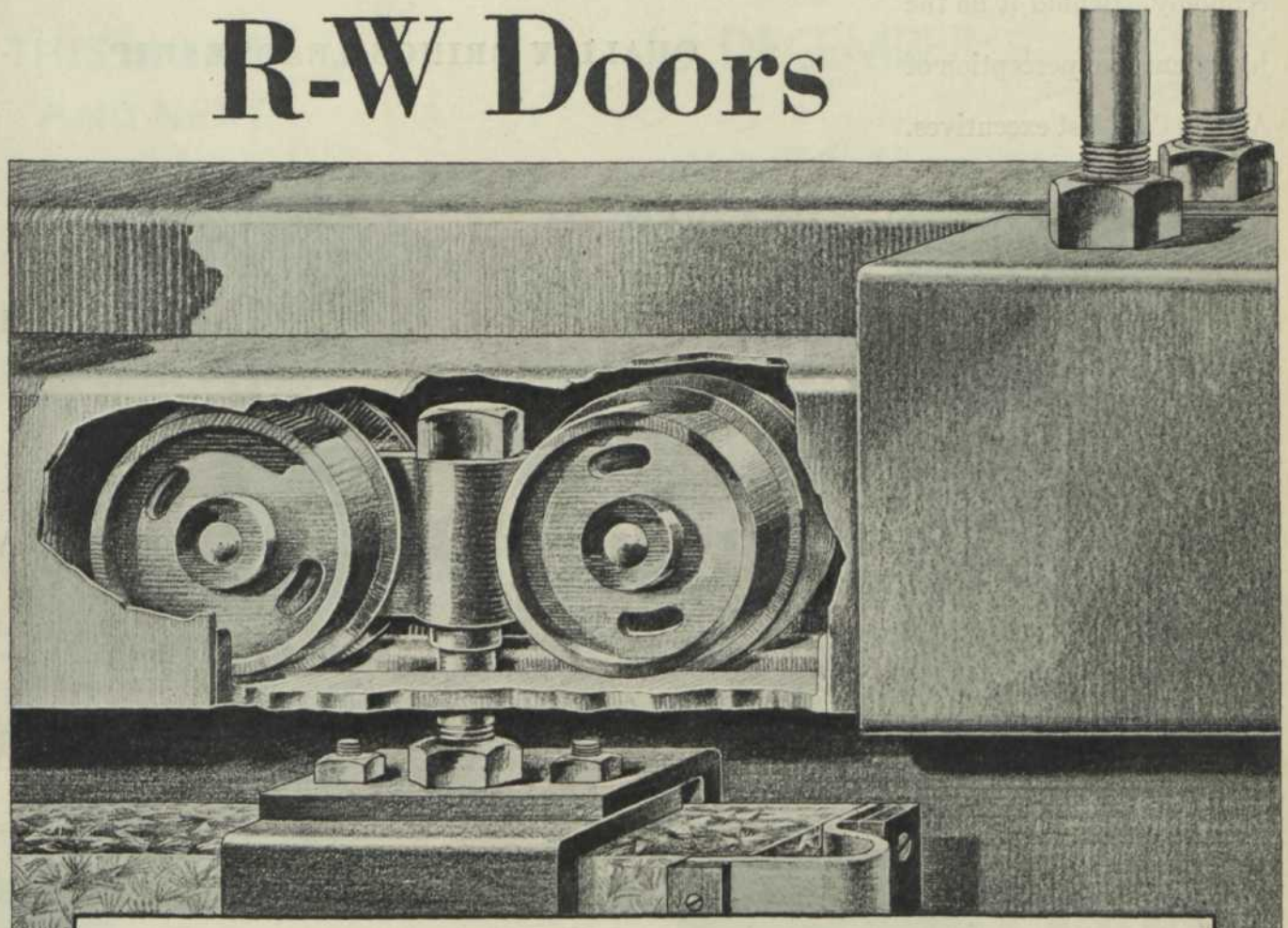
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THIS MONTH AND NEXT

WHEN the Hahn group of department stores was formed the staff of NATION'S BUSINESS read the announcement in the papers. The Office Impatient urged getting it at once.

"Not yet," said the Office Sage. "These people are attempting a big thing. They will have problems to solve—problems that neither they nor anybody else can foresee. It may be taken for granted they will solve these problems. Our purpose is not to report news but to interpret achievement, so that others may achieve. When they have solved their problems we will ask them to help others by telling how they did it."



J. J. Davis

Now, a year and a half later, Lew Hahn, president of Hahn Department Stores, has written for our readers "Things Our Merger Has to Face." In this article he describes those problems the Office Sage predicted and tells how they are being overcome. Department store men, chain store men and all others interested in buying and selling will find much information in what he says.



D. T. Farnham

If the strongest teaching is by example, Secretary of Labor James J. Davis, in his article, "Don't be a King Canute in Business," offers the most powerful lesson that NATION'S BUSINESS could possibly print.

It demonstrates the importance of the "X" forces in business. The article tells how these "X" forces, in the form of a clumsy machine, wrecked the strongest labor union this country has ever known. Mr. Davis' skill as an author makes his recital of the facts as interesting as the most gripping fiction.



W. O. Saunders

As manager of the industrial depart-

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ment the accounting firm of Peat, Warwick, Mitchell & Company, Dwight T. Farnham has had unusual opportunity to observe the formative processes of many of the larger combinations of the day. Into the discussion of the tendency to merge, he inserts the observation that mankind has always merged and that today's mergers differ from others only in size. His opinions as to what constitutes a merger that can succeed offer some new light on this moot question.



Lee De Forest

Striking an entirely new note in this magazine, W. O. Saunders, editor of the Elizabeth City, N. C., Independent, contributes, "Me and That Jones Fellow," a thought-provoking analysis of two types of citizens that will be found in every community.

Next month's contributors, to name only a few, include Henry Ford, David Sarnoff, vice president of the Radio Corporation of America; Lee De Forest, pioneer radio inventor; and J. S. Lawrence, of Princeton University.

THIS MONTH'S COVER

Painted by Charles De Feo

TO THAT breed of iron men, the early railroad builders, NATION'S BUSINESS dedicates this cover. What other men gave so much for the development of our country as this hard-fighting crew that nursed a gangling young nation into maturity. We know their leaders, but the majority we shall never know. The Chinese from the West, the Irish from the East who sweated and swore and fought and died. They battled with the Indians, with pestilence, with their jobs and with each other. They froze in blizzards and parched in desert summers. They scaled mountains and stretched bridges across streams.

The work of their hands joined the East with the West, the North with the South. Legislators and the populace condemned their leaders but over the lines they built, products rode to market. They replaced the pony express and the toiling Conestoga wagon with a kind of transportation less glamorous but more practical. They were wild, mad men, given to rioting, to revolt, to walk-outs, but always they came back and finished the job. Worse epitaphs than that have been written.

"What made your profits increase so much this year?"



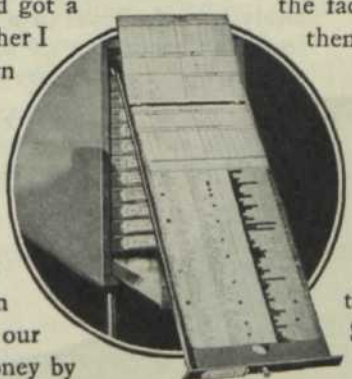
ANDERSON'S banker was really curious. And Anderson replied:

"Well, I'll tell you frankly, up to this year, we didn't know nearly as much about our business as we thought we did, and not half as much as we should have known. It was a jolt to me, I tell you, when we put in our new record system and got a complete view of our business—or rather I should say, had the facts literally thrown in our faces on our visible records.

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* * *



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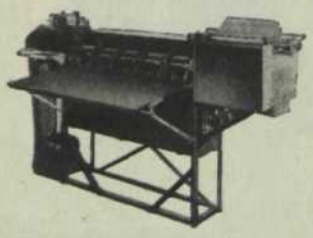
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NATION'S BUSINESS
★
A MAGAZINE FOR BUSINESS MEN

For the Game's Ache

I SAT NEXT a dear old lady at a football game recently. She was horrified at the "brutality." She felt that something should be done to stop personable young men from battering each other. When an injured player was carried off the field her indignation rose.

As she talked I could not help thinking of the other "dear old ladies" who see in business nothing but "ruthlessness." They, too, feel that "Something should be done about it."

They pride themselves that they are for the underdog—for the frail little fellow pitted against the big bruisers in the line of scrimmage. They sympathize with the man who has built up a little store. Everything he has is in that venture, not only money, but his very life. Along comes a hulking competitor and puts our friend out of the running in the rough and tumble quest of the consumer's dollar.

It is easy to share their rampant indignation. People want to know why Paternalism has not protected this man. It is plausibly argued that proper legislation would spare him the risk of injury and defeat. But laws to safeguard inertia, ignorance and immobility nullify superior skill and enterprise which inspire the brilliant plays that give zest to sport and to business.

Again, the "dear old ladies" fail to note that signing up for football or for business is voluntary. No man is compelled to enter business. Nor do college students take the hard knocks of the game under duress. They play it because their hearts are in it—"for the game's ache," as another editor has happily phrased it.

Players in both games have the benefits of expert coaching. They are taught to keep fit, to learn the fine art of taking out an opposing tackler, to make the most of the "breaks" of the game—to capitalize the fumbles and miscues of the other side.

Our "dear old ladies" demand laws against rough play. There are such rules. Business has its umpires and field judges constantly on watch for unfair tactics. It indeed has been noted that players in business are frequently obscured by the cloud of officials. More vision and less supervision in business would help the game—and be more in the spectator's interest.

The public demands competition, and it wants it clean and sportsmanlike. Nothing so quickly brings hisses from the grandstand as slugging or unnecessary roughness, whatever the game may be. "Dirty" business carries its own prompt penalties, as well as "dirty" football.

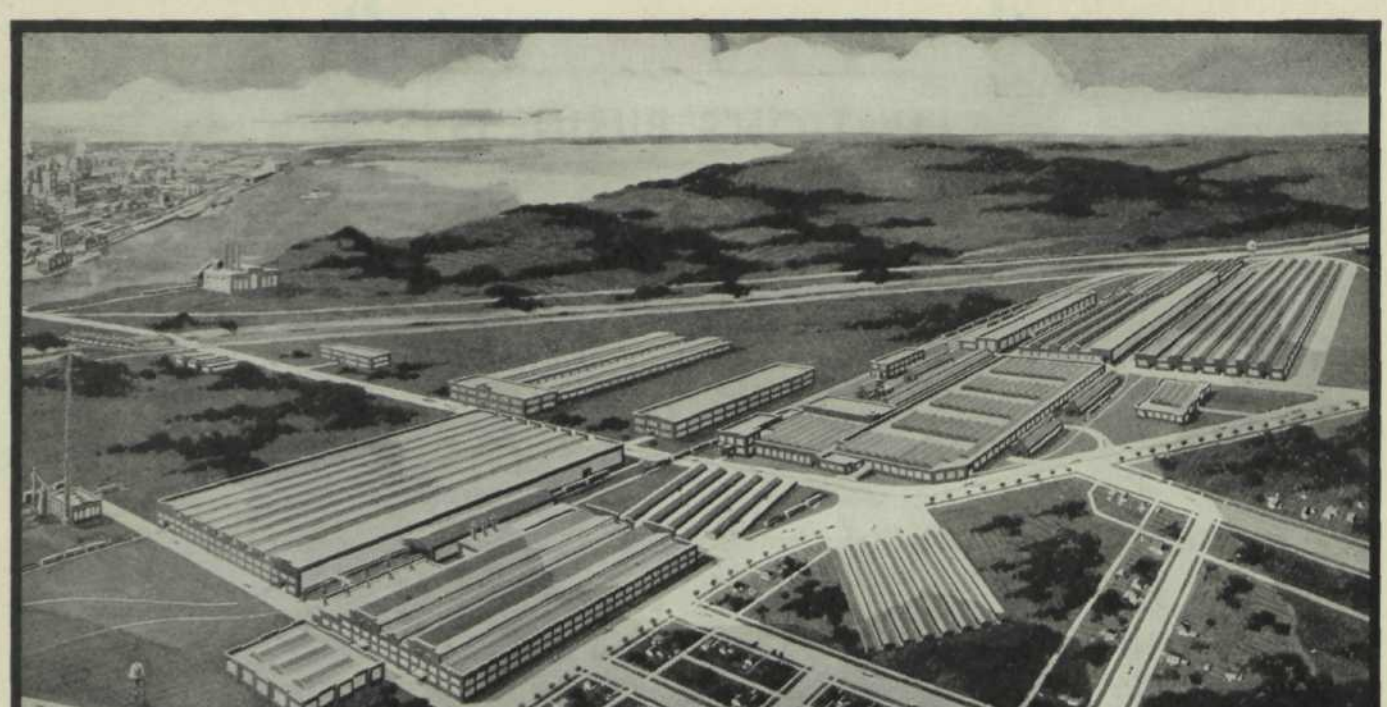
It is natural that timid souls should continually caution their countrymen against taking unnecessary risks. I submit that "without unnecessary risks history would be a record of life among the invertebrates."

Without "unnecessary risks" there would have been no Columbus, no Washington, no Lincoln—there would be no American Republic.

Mere skill and a harsh courage do not settle everything. On the other hand it is just as clear that this is not a world of automatic progress or of civilization by wishfulness. The briefest experience with life invites the conclusion that "our only real excuse for being here is that our strength may in some way help to force the cause of better things to victory."

The evidence is overwhelmingly toward our conviction that the American spirit of business is still expressed in the sportsman's creed: A fair field and no favors—and may the best man win.

Merle Thorpe



Modern straight line production plant of the Caterpillar Tractor Company at Peoria, Ill. This company has employed The Austin Method of Undivided Responsibility.

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DECEMBER, 1929 VOLUME XVII No. 13

NATION'S BUSINESS

Published at Washington by the Chamber of Commerce of the United States
MERLE THORPE, Editor

As the Business World Wags

THUS WE MAY SEE, QUOTH HE,
HOW THE WORLD WAGS—*As You Like It*

Stock Market Pro and Con

★

THE collapse of the stock exchange has released a flood of philosophy and homily. To the righteous it is an expression of retributive justice. To the victims it is a blow in the dark. The former feel that the rebuke of vanished fortunes will demonstrate anew the value of the straight and narrow path.

With satisfaction that a degree of sanity appears to be returning to our investment community and with sympathy for those whose losses have been the sacrificial instruments of restoration, we may view the matter as a manifestation of herd psychology. As long as prices were rising, the sense of restraint, the instinct of caution, the tested lessons of experience, one and all, the salutary inhibitions of men were relegated to the gutter. The mob was obsessed. Before its resistless onslaught prices did go up. They rose to levels which defied all the time-honored criteria of sound values.

An end must come to all things. First a vague uneasiness, then fear, then panic, and finally the mad, stampede. On that desperate race the accumulations of the upward journey were cast overboard.

Will it be a lesson? For the time being, perhaps. But generations of little boys have eaten green apples and had stomachaches. And other little boys have never learned their lesson.

Placing the Blame

★

WHEN an emotional typhoon sweeps the Stock Exchange and fortunes become memories, the victims invariably seek some cause upon which to pin the blame. If that cause can be identified with living men so much the better. They are susceptible to trial, judgment, and execution. Denied material reparation, the victims at least have the satisfaction of bringing the defendants to the bar.

The recent debacle has sent all the prophets scurrying for causes. While the greatest bankers confess mystification or at best attribute the collapse to a state of mind, other practitioners have variously discovered the withdrawal of European funds, the declining state of the building industry, the excessive issues of new securities and the failure of business to maintain its forward progress as the cause.

These are all unfavorable factors, it is true, but no one of them nor in fact all of them together can become a dominant factor unless a state of apprehension, fundamentally psychic, is present to vitalize them into dynamic market forces.

A Sane Viewpoint

★

EARNEST ELMO CALKINS, a wise observer of men and affairs contributed to the New York *Times* the other day a sane point of view on the stock market which well deserves repeating. Here's a part of it:

> As far as I am concerned a group of men, technically known as the Stock Exchange, gets together and decides that my Tel. and Tel. stock is worth $310 a share, and I experience a momentary glow of elation. A few days or weeks later they get together and decide it is worth only $232, and I have a feeling of disappointment, also momentary. It is unlikely that the slump will affect the continued use of the telephone or that the company will be unable to continue to pay the $9 a share. I bought my stock at an average price of $98 a share, so even at the present low—or high, according to the point of view—it is worth more than double what I paid for it.
>
> Doesn't it seem probable that mine is the situation of a great majority of holders of this and other good stocks?

Scaring Business

★

THE recent speech by Attorney General Mitchell to the members of the American Bar Association may send cold chills down the spines of some trade associations. After declaring his department's intention to enforce the anti-trust laws he went on:

> Our material prosperity has been so overwhelming, our business institutions have been increasing in size and number with such leaps and bounds, that I fear there has been a disposition here and there to go too far and transgress the law. The machin-

ery of some trade associations seems to have been made use of for transactions that come dangerously near price-fixing. With every disposition to refrain from any interference with legitimate business the anti-trust division of the Department of Justice proposes to deal vigorously with every violation of the anti-trust laws which comes to its attention.

Guardedly, too, the Attorney General announced a change from the policy of the preceding administration in giving "advice in advance" to those proposing mergers on other business transactions which might come under the anti-trust laws. The change, though, is far less serious than newspaper headlines indicated.

But the fact will always be that the one sure way to know whether a contemplated business act is or is not criminal is simple: Commit the act. If you find yourself in jail it was criminal.

A Loss to Business

THE death of Judge Edwin B. Parker on October 30 was a loss to American Business as well as to the American public. The public knew him largely for his work in settling the French war claims and later as Umpire of the Mixed Claims Commission which dealt with matters in dispute between Americans and Germany. To these and other similar tasks he brought a fine judicial mind and an extraordinary ability clearly to state the principles on which the claims should be settled.

To the world of business, and particularly as that world was represented in the Chamber of Commerce of the United States, Judge Parker was known as a valiant fighter for higher standards of business conduct. No one who heard his address at the annual meeting in May, 1928, will soon forget his ringing denunciations of business immorality. Sentences such as these have been quoted again and again:

Business must, in order to maintain its professional status and to reap the unquestioned advantages of group action, scrupulously discharge its group responsibilities, and among these responsibilities is to see to it that the profession of business is purged of those pirates whose acts stigmatize and bring business generally into disrepute. . . .

If organized business is content to sit supinely by and permit the ruthless few to undermine the sound foundation on which it rests, then indeed does business richly deserve that swift manifestation of public indignation that will surely be visited upon it.

Nor should it be forgotten that the Code of Business Principles adopted by the Chamber in 1924 was largely drafted by Judge Parker.

In him American business has lost a friend and counselor who, ready always to assert the probity of business as a whole, was not less quick to denounce wrong doing in high places or in low.

Sixty-four Years in a Chamber

IN September this magazine cited the fact that John D. Rockefeller, Sr. had been a member of the Cleveland Chamber of Commerce since 1870 and then made this rash offer:

NATION'S BUSINESS will give a bright new dime to the endowment or building fund of any chamber which will produce a member with a record of more than 59 years in the organization.

Never did we expect to be called upon for the contribution and had made no provision in our budget for any shiny dime but the September issue had not been long in the hands of our readers when this letter came from Charles T. Gwynne, executive vice president of the Chamber of Commerce of the State of New York:

This is a claim for that bright new dime referred to on page 12 of the September issue of NATION'S BUSINESS.

Our Chamber has in its membership Mr. David B. Dearborn, who was elected a member November 2, 1865. He will have completed, therefore, in another month sixty-four years of membership. Mr. Dearborn is ninety-seven years old and is still hale and hearty.

As another item of interest we have two other members who were elected over fifty years ago and several others who are the third or fourth generation of their families to be members of the Chamber of Commerce of the State of New York.

We've sent the dime, the shiniest we could get from the United States Treasury, just over the way from the offices of NATION'S BUSINESS. And in spite of the disarrangement of the budget, we did it gladly. We hope to know more about Mr. Dearborn. It's a safe bet that he's a worthwhile citizen.

Up and on the Way up

"WHO should read the NATION'S BUSINESS?" That's a question easily asked and if one is willing to dismiss it with a generality, easily answered:

"Everyone who is interested in business, who lives by business or who wants to know more about business."

But that answer won't do. It's too vague, too meaningless.

Let's try to make more definite the conception of the audience which NATION'S BUSINESS seeks.

Take a good sized bank in a good sized city. It has at the top a chairman of the board and a president, in either or both of whom the real final authority may rest. Below them is a layer of first vice presidents, men of real authority, men who are concerned with the very great questions that come before an important bank. Below them is another larger layer of second vice presidents, assistants to the vice presidents—banks have many titles—younger men beginning to deal with bigger affairs.

And so we can picture layers below these, of youngsters who have just won their first spurs. Of course these layers are not clear cut like those in a jelly cake, but we know that there is inevitably in business a sort of hierarchy. No one can class the business world into executives and into nonexecutives—into those who tell the others what to do and those who do what they are told.

If this latter condition were true, then NATION'S BUSINESS would see its place clearly. It would want as its readers those who are commanding. But if we see this business world about us as a series of layers, where does NATION'S BUSINESS seek its readers?

In our youth we were told that it was necessary to begin at the bottom and work up. Here we'll begin at the top and work down. The president and chairman of the board we want—and have—as readers. Frequently they are more than readers, they are the men to whom we turn for editorial ideas and articles, or to straighten out our own thinking. The same is true of the next

layer of the major vice-presidents and department heads. They are our readers. But these men on top are made men, men whose positions in the business world are assured. They are perhaps beginning a little to let go of work.

What of the next group? Most important to NATION'S BUSINESS, for in them are to be found the business leaders of the next decade, the men who in 1939 will be controlling the bank or have moved from the bank to help in the control of a railroad, a chain of department stores or a factory.

And so we might go further down, but what's the use? If we decide that we can't divide the business world into those who command and those who accept commands, but that it's a ladder up which men are seeking to climb, let's then try to sum up the NATION'S BUSINESS reader to whom we look to read and enjoy the magazine: *He's the man who is up or on the way up.*

Millionaires—New Style

★

MILLIONAIRES are common in the United States today, even when stock market flurries are at their worst, that is if by millionaire we mean a person having a million dollars. To be a millionaire really worth talking about these days one should have an income of a million dollars and even that verges on the commonplace for there were 290 of them in this country in 1927 and probably more in 1928.

To be really exclusive, one should have an income of $5,000,000 or over for there were only 11 such incomes piled up that year. The Bureau of the Internal Revenue does not give us the names of the 11, but only the states in which they pay taxes. Here is a table of them:

New York	7
New Jersey	1
Illinois	1
Pennsylvania	1
Wisconsin	1

Here's a fine chance for a guessing contest. Henry and Edsel Ford are ruled out since Michigan is not in the list. But who's the Wisconsin man who in 1927 had an income of more than $5,000,000? Most newspaper readers would guess Andrew Mellon as the Pennsylvanian, but who in New Jersey had an income in excess of between $13,000 and $14,000 a day.

Mathematics and Business

★

AT a recent meeting of the American Mathematical Society, its secretary Dean Richardson of Brown said that mathematics ran far ahead of other sciences, that none of the practical sciences would be able for years to utilize the things that mathematicians now know. Professor Fort of Lehigh who presented a report on the general theory of factorial series—a subject for which we combine the most profound respect and the most abysmal ignorance—said that engineering and other sciences that seem nearer to life would not be able to use the material in his report for at least twenty years.

At first thought it seems like the statement of a friend of ours who wrote a treatise on vowel sounds in Hawaiian dialects and seemed pleased at the thought that only ten men in the world could read and understand it.

But Professor Fort's work may yet reach the everyday life of all of us. The chain from mathematics to engineering or chemistry or electricity to making and selling goods is a very real one.

Among the thirty-seven world famous scientists whose figures form a frieze around the hall of the Academy of Science Building in Washington are two Americans, Benjamin Franklin and Josiah W. Gibbs. All of us have heard of the former, few of the latter, yet it was Gibbs' work on vector analysis that shaped many of the developments of the modern steam engine. So, too, a scientist might take the electrical refrigerator and trace it back through electrical engineering to mathematics.

Mergers and Specialists

★

AT TIMES a sentimental world mourns the disappearance of the "old-fashioned doctor," the general practitioner, bewails the increases in numbers of specialists and makes more or less feeble jests about the otologist, who limits his practice entirely to the left ear.

But our wide and deeper knowledge made specialism and the specialist inevitable and one of the great advances in medicine has been the grouping together of specialists in such clinics as the Mayos'.

Business is going through somewhat the same advances as has medicine. It grows more complex. The day of the "general practitioner" who knew all about every branch of a business, passes as business grows larger and more intricate. The day of the specialist in selling, in production, in office management, in finance has come.

That's a factor in some of the present day mergers about which this busy world is so busy talking. It's the need of men that brings industries together.

If Company A has at or near its top a man who has the selling sense and Company B, making a product of a kindred nature, has a man with a sort of sixth sense of economical production, what more natural than that Companies A and B should put those abilities together?

So perhaps some of our mergers are really clinics of business combining a number of specialized abilities.

What's New in Distribution

★

TALKING recently to a group of New England business men, O. H. Cheney of the Irving Trust Company of New York asked if after all there was anything new in distribution methods. Then he reported this case:

> In France there is a chain-store system with 956 branches specializing only in the distribution of coffee. That, even in this country, would be considered a pretty sizable chain—and I don't know whether even here there is as large a chain specializing like that. Pretty modern, isn't it? How does this gigantic chain sell? From each branch salesmen go out on foot pushing a three-wheeled barrow laden with coffee—and each home is reached about once a week! What, I ask, is the modern method?

In October NATION'S BUSINESS called attention to

the fact that the Hudson's Bay Company had been running a chain of stores for more than 250 years. An alert department-store owner in a Pennsylvania city goes back to primitive peddling and sends out over mountain woods three motor trucks full of fresh goods that women far away can't always come to town to buy. It is not recorded that Ecclesiastes was contradicted when he said, "There is no new thing under the sun" nor did he get an affirmative answer when he asked, "Is there anything whereof it may be said, See, this is new?"

Celebrating the Tin Can

★

WERE it not so utterly prosaic the tin can might well be placed beside giant locomotives, high powered cars, flowing concrete highways and titanic skyscrapers as one of the symbols of American progress. Unfortunately the tin can has a past which seems to bar it from such society. It has been pre-empted by the caricaturist and the petty wit. It has been exploited so relentlessly as the proper ornament for a dog's tail, and the head gear of our comic-page buffoons that any attempt to elevate it provokes hoarse laughter.

Yet it is difficult to appraise our dependence upon this humble container or to estimate the debt which we owe it. The tin can has made possible a degree of sanitation in the service of food, a facility in the distribution of all kinds of goods and a preservation of perishable commodities which have added materially not only to the comfort of our existence but to the income of all whom it serves.

From a lowly domestic device the humble tin can has graduated into an instrument of international trade. It has become an ambassador of American commercial progress. Our canned goods are going in increasing volume to all parts of the world. In the years before the war we exported an average of $20,000,000 worth of canned goods each year.

In 1928 our total exceeded $78,000,000 while exports for the current year will probably approach $85,000,000. Since practically all of these exports are food products the tin can is playing an important part in reducing the farmer's surplus. Derided in song and cartoon the tin can is in fact one of the pillars of American prosperity.

Studying Business —or Football

★

FROM the cloistered college of half a century ago there came, at least in theory and largely in fact, a flow of youth who were headed for what then were called, "the learned professions," the law, medicine, the ministry and teaching. Scarcely an individual in that stream intended to go into business.

The writer recalls hardly twenty-five years ago when a roll call of his class showed one man intending to enter business.

Things have changed. It is probably safe to say that at least a third, very likely a half, of the young men in college deliberately plan to go into business.

Here's a symptom, *The Dartmouth*, daily paper of the college of that name, carries each day quotations of twenty or thirty leading stocks. Twenty-five years ago in that worthy institution of learning, not one student in fifty had ever heard of the stock market nor ever read a piece of business news.

Times, as we have already platitudinously remarked, do change, but we doubt if they've changed to such an extent that Dartmouth was more worried over the stock market downfall of late October than over the Dartmouth downfall against Yale.

Death and Taxes

★

TWO things are certain, says the crossroads moralist, death and taxes.

Each is still inevitable but it is interesting to note that we have done something to put off the appearance of death. Taxes come upon us if not with greater regularity, at least with more powerful impact.

The man who was born in this country in 1901 might expect to live more than 48 years; the man born 20 years later had an expectancy of more than 55 years.

Look at taxes! The average per capita in 1913 was $22.50; in 1927 it was $77. We keep putting death off, but can nothing be done about taxes?

BUSINESS INDICATORS

Latest month of 1929 and the same month of 1928 and 1927 compared with the same month of 1926.

	Latest Month Available	*Same Month* 1926 — 100% 1929	1928	1927
Production and Mill Consumption				
Pig Iron	October	108	101	84
Steel Ingots	October	95	110	78
Copper—Mine (U. S.)	September	108	108	91
Zinc—Primary	October	93	91	91
Coal—Bituminous	October*	91	91	81
Petroleum	October*	128	112	111
Electrical Energy	September	131	119	106
Cotton Consumption	October*		102	101
Automobiles	October*	108	112	66
Rubber Tires	August	97	122	94
Cement—Portland	September	104	108	106
Construction				
Contracts Awarded—36 States—Dollar Values	October	97	112	110
Contracts Awarded—36 States—Square Feet	October	—	115	106
Labor				
Factory Employment (U.S.)—U.S.B.L.S.	September	99	95	96
Factory Pay Roll (U.S.)—U.S.B.L.S.	September	103	96	95
Wages—Per Capita (N.Y.)	September	104	101	101
Transportation				
Freight Car Loadings	October	101	98	93
Gross Operating Revenues	September*	95	94	96
Net Operating Income	September*	92	92	91
Trade—Domestic				
Bank Debits—New York City	October*	191	157	119
Bank Debits—Outside	October*	121	112	104
Business Failure—Number	October	103	115	101
Business Failure—Liabilities	October	94	105	109
Department Stores Sales—F.R.B.	September	108	106	99
Five and Ten Cent Store Sales—4 Chains	October	119	114	108
Mail Order House Sales—2 Houses	October	169	135	108
Wholesale Trade—F.R.B.	September	97	95	96
Trade—Foreign				
Exports	September	99	94	95
Imports	September	102	93	100
Finance				
Stock Prices—30 Industrials	October	212	164	125
Stock Prices—20 Railroads	October	145	121	119
Number of Shares Traded	October	332	229	121
Bond Prices—40 Bonds	October	98	102	104
Value of Bonds Sold	October	151	102	116
New Corporate Capital Issues—Domestic	October	337	258	266
Interest Rates—Commercial Paper, 4-6 Months	October	136	122	89
Wholesale Prices				
U. S. Bureau of Labor Statistics	September	98	100	97
Bradstreet's	October	97	102	105
Fisher's	October	96	103	102

	July 1912 = 100% *Sep.* 1929	*Sep.* 1928	*Sep.* 1927
Retail Purchasing Power, July 1914 = 100%			
Purchasing Power of the Retail Dollar	61	61	61
Purchasing Power of the Clothing Dollar	60	58	59
Purchasing Power of the Food Dollar	62	63	65
Purchasing Power of the Rent Dollar	63	62	60

† Excl. Boston, Cleveland, Chicago, Los Angeles, Phila., Detroit, San Fran., and New York.

* Preliminary.

Prepared for *Nation's Business* by General Statistical Div., Western Electric Co.

SINCE LAST WE MET

★

A Business Record October 10 to November 11

OCTOBER

10 • AMERICAN SHIPYARDS invited by United States Lines to submit bids for two 30,000-ton liners, largest ever built in United States.

14 • GENERAL MOTORS announces its plan for the General Motors Radio Corporation, an alliance which includes Radio Corporation, General Electric and Westinghouse Electric. Among other things, it will install radios in automobiles.

15 • AMERICAN FEDERATION OF LABOR announces a campaign to unionize the South.

18 • TROWBRIDGE CALLAWAY of Callaway Fish & Company elected president of the Investment Bankers.

GOVERNMENT announces that corporation taxes gained 19 millions in the third quarter despite the lowering of the rate. For the first nine months cigaret taxes were $271,671,000, an increase of 32 millions over 1928.

20 • KREUGER who makes matches in Sweden lends Germany $125,000,000 and will have a virtual monopoly in that country. The Soviets object in vain. Kreuger stock is dealt in on the New York Stock Exchange. Internationalism!

FEDERAL FARM BOARD moves to provide minimum prices for cotton in the ten spot markets. It has $100,000,000 available and if that isn't enough it will ask Congress for more.

21 • GENERAL MOTORS adds Dornier to Fokker to make its aircraft division.

PENNSYLVANIA RAILROAD arranges to electrify its lines through Baltimore and will discard steam from New York to Washington. Which does not look as if railroads were to disappear in the face of autos and aircraft.

23 • HOOVER announces a tremendous waterways program which includes "modernizing" the Mississippi and opening the St. Lawrence route to the ocean.

STOCKS start down with a paper loss of four billions.

OCTOBER

24 • "BLACK THURSDAY". Stocks keep on down in the worst market panic of years with sales of nearly 13,000,000 shares. Bankers rush to the rescue with millions in money and millions of reassuring words.

PRUDENTIAL ASSURANCE of London lends $5,000,000 to British Motor Car makers to help them fight for foreign trade.

25 • ATTORNEY GENERAL MITCHELL tells the American Bar Association that he proposes to enforce the antitrust laws.

THE MARKET takes heart as President Hoover takes a hand in the reassuring.

A NEW COMPANY similar to Standard Brands is to unite Kraft, Phenix Cheese, Hershey Chocolate and Colgate-Palmolive-Peet. Assets to start with $125,000,000 and more companies expect to come in. National City Company managing. To be called International Quality Products Corp.

26 • FEDERAL FARM BOARD having propped up cotton, proceeds to prop up wheat with another $100,000,000.

28 • THE TWO leading rayon producers of Germany agree to regulate production and will work for an international agreement.

29 • MARKET troubles again. A black Thursday is succeeded by a black Tuesday. Sales 16,400,000 shares. Steel and American Can each raises its dividend.

THE NATIONAL FARMERS Grain Corporation incorporates in Delaware under the fostering hand of the Farm Board.

F. & W. GRAND 5-10-25 cent stores unites with Isaac Silver and Co. in a chain of 140 stores selling $31,000,000 a year.

30 • U. S. STEEL buys Columbia Steel, largest Pacific Coast producer.

NOVEMBER

1 • HENRY FORD announces reductions ranging from $15 to $200 on all models. To help maintain prosperity Edsel explains.

SINCE LAST WE MET

NOVEMBER

1 • FEDERAL RESERVE rediscount rate is cut from 6 to 5 per cent and the Bank of England's rate from 6½ to 6 per cent.

THE W. B. FOSHAY COMPANY, the Public Utilities Consolidated Corporation, and the W. B. Foshay Building Corporation of Minneapolis go into receivership. They control public utilities in 30 states.

A DRAFT agreement has been drawn up and will be submitted to European nations by which they agree not to raise tariffs.

NATIONAL CITY BANK bulletin shows net profits of 638 corporations for the first nine months of the year to have been $3,223,620,000, a gain of 20.3 per cent over the first nine months of last year.

2 • THE *NEW YORK TIMES* reports losses in stock values for 240 issues of $9,514,000,000 for the month of October, following a decline in total values of the same shares of $2,814,000,000 in September. The gains in these shares in June, July and August had totaled $10,594,000,000.

BROKERS' LOANS drop $2,440,000,000.

STEPHEN SANFORD & SONS and Bigelow-Hartford Carpet Company merge in a company that will make from 30 to 40 million dollars worth of carpets a year.

3 • TONNAGE under construction in America has reached a new high figure and we are now second only to Great Britain.

CORPORATION tax returns complete for 1927 income show that 457,031 made returns. Of these 259,849 reported net incomes totalling about $9,000,000,000. Deficits of nearly $2,500,000,000 were reported by 165,826 companies. There were 49,356 inactive corporations.

THE INTERNAL REVENUE BUREAU says that 290 persons in 1928 paid taxes on incomes of more than $1,000,000 received in 1927. Of these 26 were women. There were 11 incomes of $5,000,000 or over and of these Michigan had none.

THE WHARTON SCHOOL of Finance having made a survey says that from 1925 to 1928 the output of full-fashioned hosiery grew from 12 million to 22 million dozen pairs.

4 • PENNROAD, a corporation controlled by the Pennsylvania Railroad buys the Pittsburgh and West Virginia upon which the Van Sweringens had their eye.

NOVEMBER

THE MARKET keeps on down.

5 • THE *JOURNAL OF COMMERCE* correspondent writing from Winston-Salem, N. C., says that there is a nation-wide movement to consolidate the furniture manufacturing business.

6 • DROP in the prices of the two stocks ends for a time the plans to consolidate National City and Corn Exchange and America will not for the present have "the largest bank in the world."

THE I. C. C. PERMITS the Nickel Plate (Van Sweringen) to issue notes to buy control of the Wheeling and Lake Erie.

THE *IRON AGE* reports that cancellations in iron and steel are negligible but that there is a tendency on the part of buyers to look things over before placing orders.

7 • DROP IN WHEAT PRICES to below the Farm Board's level moves Chairman Legge to say that anyone who sells wheat or cotton now unless driven to it is foolish.

GOODYEAR RUBBER COMPANY starts work on the world's biggest dirigible to be 785 feet long.

BROKERS' LOANS drop $650,000,000 as the market slips and staggers back a little.

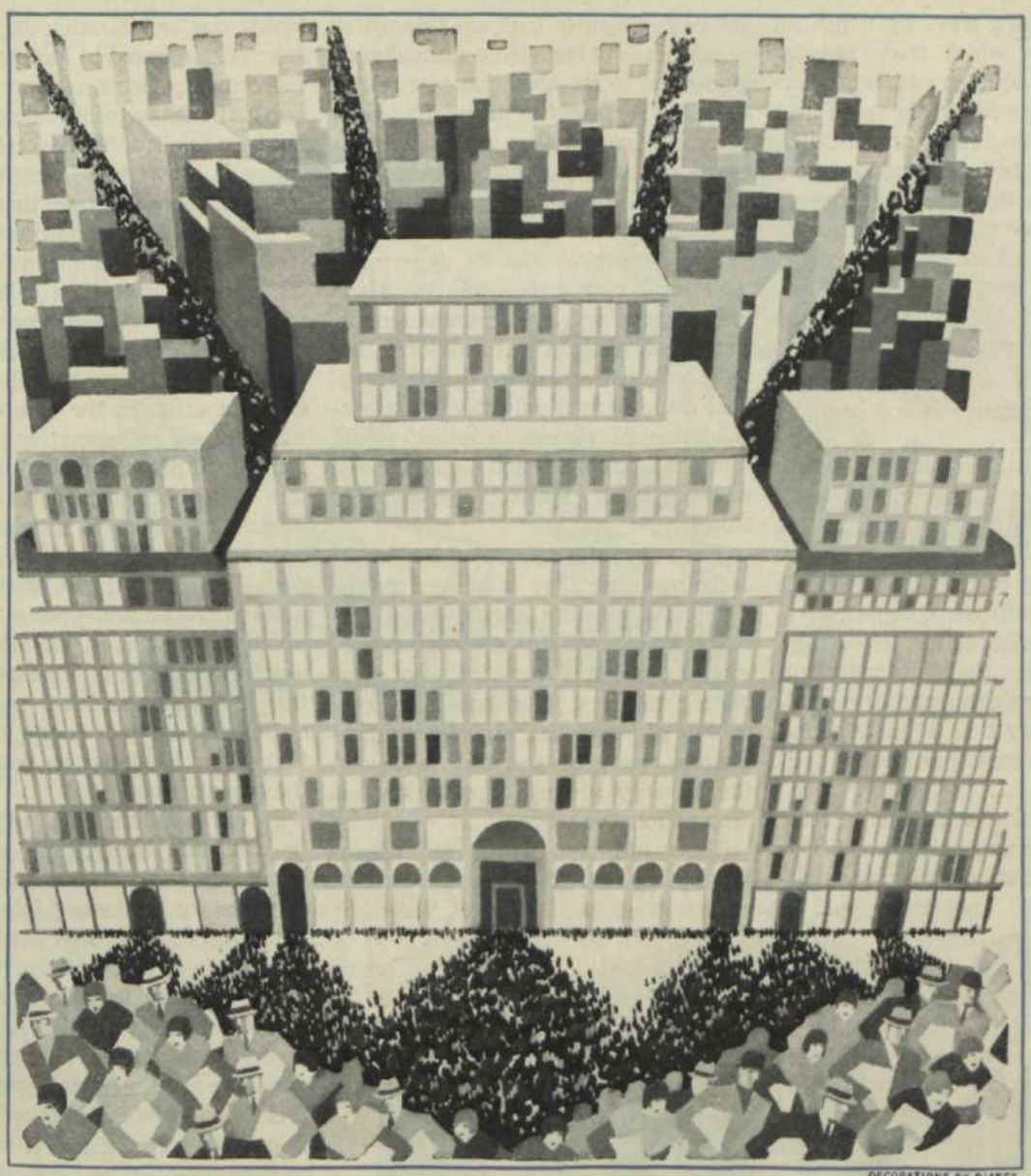
A TELEPHONE, the dial of which speaks the call numbers to central, is shown by the Bell Laboratories. To be used to connect automatic and hand-managed exchanges.

OCTOBER PRODUCTION of steel ingots was above September's but there were two more working days in October and the daily average was slightly less.

8 • THE TENTATIVE Federal budget is $3,830,000,000, about one hundred million under last year, but that doesn't include what the Federal Farm Board needs. And, says a hard-hearted Treasury, there may be no tax reduction this year.

9 • BASLE, SWITZ., is to be the home of the Bank for International Settlements.

11 • NEW YORK TELEPHONE COMPANY gets an increase in rates estimated to amount to about $3. per year per phone.



DECORATIONS BY D'ARCY

Approximately 14.77 per cent of the 44 billion dollars spent at retail in 1928 passed through department stores—a $6,500,000,000 volume

Things Our Merger Has To Face

By LEW HAHN

President, Hahn Department Stores, Inc.

● YOUR job, in fact every one's job, says Mr. Hahn, is dependent upon a sound and profitable system of retail distribution. Too often retail distribution has been neither sound nor efficient, but he sees in consolidation a powerful force for correction of these conditions.

Therein, as he expects the next ten years to prove, will be found the means of putting distribution on a mass basis, in getting it into step with the times

WHEN the plan to consolidate certain major functions of the largest group of department stores ever brought together—now functioning as Hahn Department Stores, Inc.—was in its preliminary stages more than a year ago, there was one constant subject of discussion among those associated in working out the plan. That subject concerned the

need of developing ways by which all the information which trade associations, business colleges and other forward-looking agencies in the retail field had been collecting for years, could be translated into better store operation.

One after another the store owners who have now become active partners in the enterprise, the bankers who arranged for its financing, and the specialists employed to direct its operations, called attention to this great need.

Its inefficiency is costly

RETAIL distribution, it was noted, with a total sales volume in 1928 estimated at some 44 billion dollars, is the nation's largest industry. It uses more capital than any of the other divisions of business. It employs more people.

In its most efficient and economical branches, however, there is a wider gulf between the maximum and the minimum of efficiency than is to be found anywhere else except possibly in agriculture.

That distribution costs should have continued to rise under these conditions was inevitable. But only when these rising costs began to back up through all the channels of commerce and industry, giving rise to the condition now widely described as profitless prosperity, did it become apparent that every industry, every job and, for that matter, every profession is dependent on a sound and profitable system of retail distribution.

The owners of the 29 department store units now included in the Hahn group came into the combination because each of them was convinced that more effective operation in the retail field could be had only through a consolidation of ownership which would unite the strengths and eliminate the weaknesses of individually operated stores.

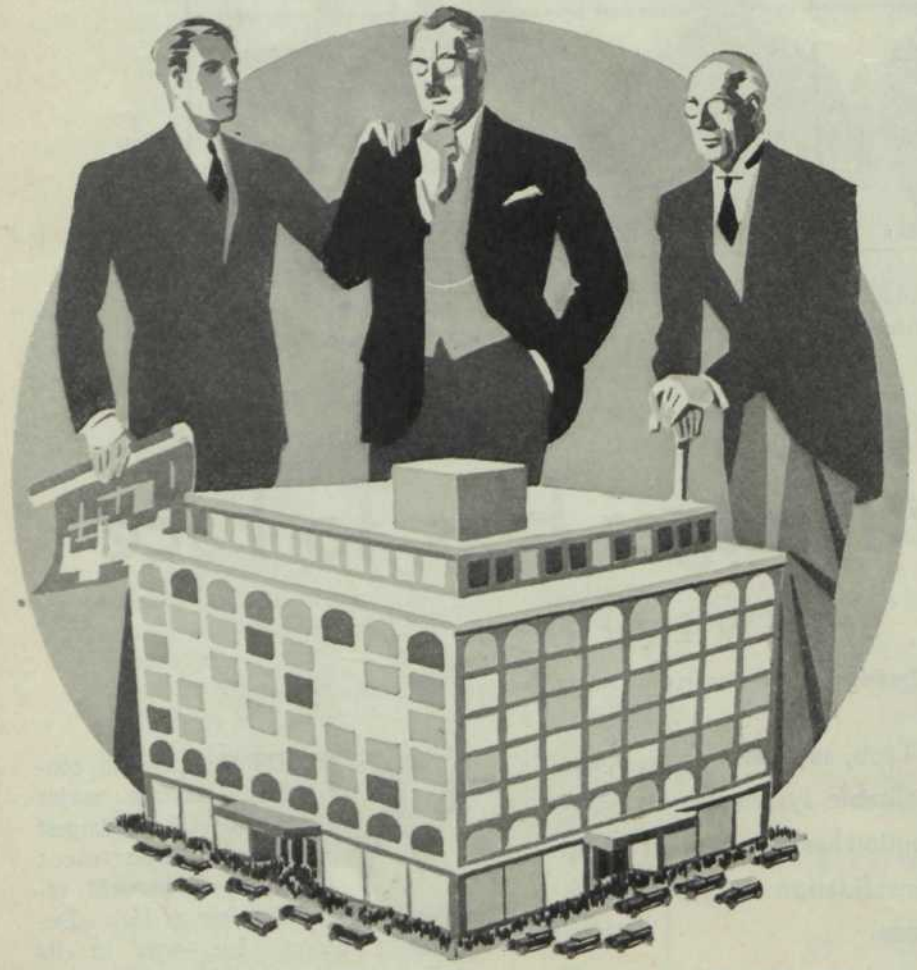
They were not impressed by size as such, nor were they influenced in the slightest degree by outworn and discredited conceptions of competition, such as the idea of cornering, or of dominating markets. They saw size as a pooling of knowledge, experience, information, enterprise and finance beyond the capacity of any organization less than national in scope.

There has been widespread misunderstanding of the fundamental facts on which our organization is based. We have been referred to loosely as a holding company, when our primary functions are management and operation. It has been implied that the central organization is a sort of superstructure built over and above, rather than into, the store units. These units constitute what has come to be known as a "chain" and therefore we have been called a chain system of department stores.

All these designations presuppose the possession of a body of knowledge that does not exist. In the type of holding, management and operating corporation familiar in manufacturing—and in certain highly specialized fields of retailing—such knowledge is an essential preliminary to the beginning of the business. With it at hand, control of the units is centralized, policies are drawn up to apply without variation to each unit, merchandise and methods of handling it are standardized, and the flow of directing thought is in but one direction—from headquarters down through the organization.

In our combination it might almost be said that the reverse is the case. While a strong central organization was necessary for the beginning of operations, the major part of that organization's strength at the inception of the plan was drawn from the individual units. Eventually all of it will be supplied from that source.

The function of the central organization, therefore, is to assemble and coordinate information as well as to distribute it; to nationalize and, therefore, to multiply specific abilities and plans which have been limited heretofore to local development.



The average department store's experience may be likened to the life of a man. First the rapid growth of youth, then slower growth to maturity, and finally gradual decline and decay

Will it dominate production?

IN THE Hahn group today are 29 stores doing a gross business of approximately $115,000,000 annually. Other stores eventually may come into our organization. The original plan calls for the acquisition of department stores with a sales volume of a billion dollars a year. Since this would be about 25 to 30 per cent more than the gross business of the largest corporation now operating in the retail field—the Great Atlantic and Pacific Tea Company—it is perhaps only natural that the figures should have given rise to some erroneous conjectures.

Chief among these is the belief that the primary purpose of our combination was to establish a buying power so overwhelming that it would enable us, in effect, to dominate production



It is unquestionably true that there is no magic in mergers of themselves

in the lines we handled. I shall have more to say later about the details of our buying policy—which we believe is unique—but at this point I should like to emphasize that it is distinctly secondary in importance to our merchandising, sales and management programs.

One must buy, of course, before one may sell, but the current national interest in distribution has proved that a knowledge of what to sell and how to sell it is an essential preliminary to economical buying.

Merchandise worth approximately $75,000,000 at cost is now purchased by our stores. While eventually we expect practically all of that purchase volume to be cleared through our central organization by our stores' own buyers, it is evident that, if we are to protect the initiative of our stores and their buyers, it is quite impossible to swing that great volume here or there as a club.

Standardized accounting

THE CENTRAL organization can and has taken immediate advantage of certain obvious economies in buying and has standardized cost and accounting systems, but that merely clears the deck for its major function, the study of distribution and the application of the discoveries made to all the units in our system.

Assuming that our original plan is carried out and that after some years we reach a total gross volume of a billion dollars a year, it may be of interest to note that we shall be a less dominant factor in retailing as a whole than is General Motors in the automotive industry, the United States Steel Corporation in its field or the Standard Oil groups in petroleum.

This is evident from analysis of the figures on total retail sales compiled for 1928 by Dr. Paul H. Nystrom, professor of marketing at Columbia University. This authority says that approximately 14.77 per cent of the 44 billion dollars spent at retail last year passed through the hands of department stores, which would show a total department-store volume of $6,500,000,000.

A corporation which would hold a position in the department-store field similar to that of United States Steel in its industry would, therefore, have to show gross annual sales of about three billion dollars. A quarter of a century ago many shrewd investors and business men regarded the Steel Corporation as too big and unwieldy to be managed. In recent years, however, both the American Telephone and Telegraph Company and the General Motors Corporation have surpassed it in invested capital. Unquestionably we shall have even larger combinations of capital, larger armies of employes and groups covering far wider ramifications than any of those that are now in existence.

The idea that, because of the human factors involved, retail merchandising will not respond to the fundamental management policies to be found in all of these great combinations is not new. As a matter of fact it was freely voiced half a century ago when Wanamaker and other pioneers began to establish the department store. Later the same thing was said of the chain stores.

Stores are now national

UNDOUBTEDLY that belief has delayed the development of big business units and of national perspective and direction in retailing. But in recent years an additional form of economic pressure has begun to manifest itself through public participation in the investments of retail enterprises.

Until a few years ago, nearly all department stores were owned by single families or by small groups which had been closely related for two or three generations. The experience of the average department store, like many other enterprises, may be likened to the life of a man.

First the period of birth and the rapid growth of youth, then a slower growth to maturity, and thereafter the enjoyment of full powers when enthusiasm and industry bring success.

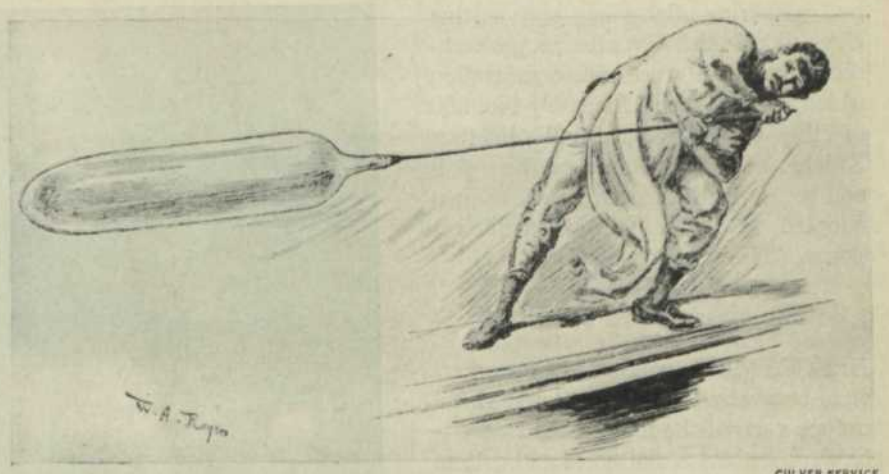
Then follows a period of slackening, in which the momentum acquired earlier

(Continued on page 90)



China Basin, a Terminal of Pacific Trade—By Earl Horter

CHINA Basin, since the olden, golden days of San Francisco's youth, has been a rendezvous of ships and sailor men from the seven seas. Once a base for the packet ships from out of China across the sea, it's now, in this age of concrete pier sheds and great steel cargo carriers, a principal point of transshipment for a thousand items of commerce. Here lumber and machinery, peaches and prunes, apricots and asparagus, artichokes and lima beans are listed on the outward cargo manifest; destined to be exchanged for copra and cocoa beans, coffee and tea, pineapples and spices in a thousand ports of call



CULVER SERVICE

For 2,000 years blowing a cylinder was a first step in making glass

Don't Be a King Canute in Business

By JAMES J. DAVIS

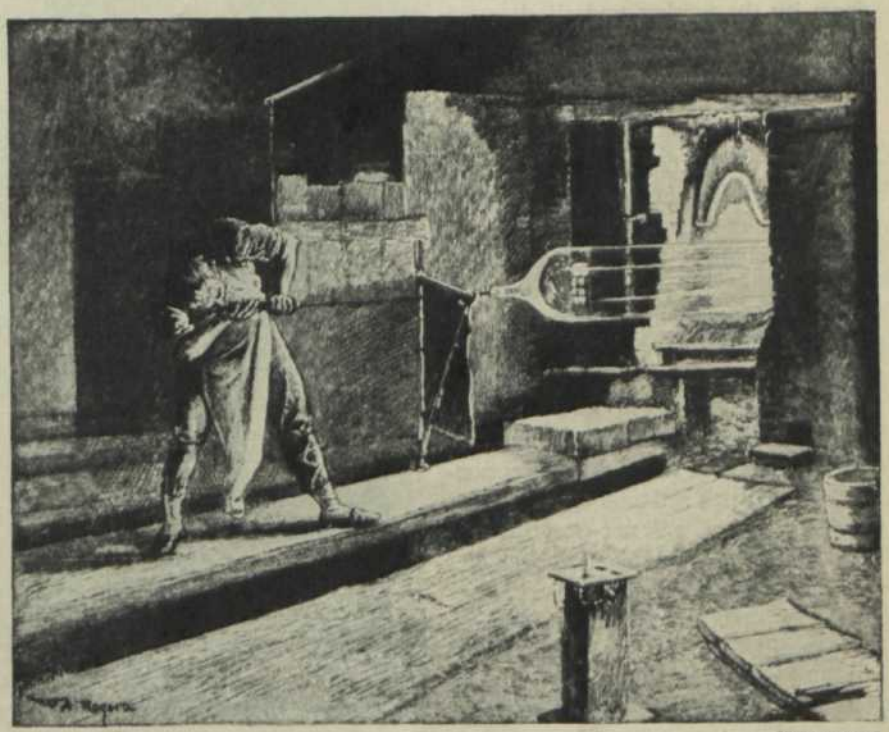
United States Secretary of Labor

IF you search your memory for a minute, you will remember the story you learned in school of Canute the Great, the Danish king who ruled England about 1025 or so, and did a better job of it than any man of the time except King Alfred. For all his fierce temper, Canute had a streak of humility in him, and one day rebuked his courtiers in a manner that remains an immortal story with a pointed moral.

The courtiers had advised a course which the king knew to be against every force of reason, and to prove his point he had his throne moved down to the River Thames and, with all his royal might, bade the tide to recede. When the tide refused to obey even him, he pointed his courtiers to the folly of what they advised. That warning still stands for every man who would pit his puny strength against the forces of nature or progress.

How many business failures, if you think of it, are due to the type of man who plants himself in opposition to the plain trend of economic law and refuses to bend before it? Sometimes the same failure occurs outside the field of business. It is the inevitable consequence of a stiff pride stubbornly opposed to every current of the times.

Back in 1880 a group of honest Americans, highly skilled in the craft of blow-



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Each step, even putting a hole in the cylinder, took skill

★ IT is a short step from a position of power to a place of complete unimportance, a step down which Progress stands ready to hurl the unwary business man who allows present success to lull him into complacency. This is the story of a powerful organization that dared to challenge Progress. There is a moral in it for all of us

ing, gathering, flattening and cutting glass, to give their arts the proper technical names, formed an organization which became Local Assembly No. 300 of the then famous and vigorous Knights of Labor. Proud of their skill and secure in their strength, these men adopted as their motto the militant slogan, "Never Surrender."

The glass unions combine

BEFORE 1880, window-glass workers were organized into scattered local unions, each of the four skilled trades—blowers, gatherers, flatteners and cutters—having their separate organizations. In 1879 the blowers and gatherers took their first step toward national control when they entered the Knights of Labor. In a few months the cutters joined them and, in 1880, the flatteners. That rounded the circle and from that time on they maintained a policy of keeping all four branches of the industry under the thumb of one strong, central body.

It happens that in the making of glass there was also a snapper, whose work followed that of the blower. This snapper squared the end of the cylinder blown by the worker and slit it open, ready to be flattened. Repeatedly throughout the history of the four-ply organization, efforts were made to include the snappers for the economic advantage of all concerned but the unshakable attitude of craft caste prevailed and the other four trades never recognized the snapper as a skilled worker.

In 1880 glass was still manufactured pretty much as it was in the days of the Pharaohs. For thousands of years the making of glass had required human skill and no one could foresee a day when this method would be superseded. The skill required was highly exceptional, the work was arduous and the craft of blowing glass was not overcrowded.

Local No. 300 included so many of the best blowers of glass that the "Never Surrender" motto soon came to mean what it said. For 40 years Local No. 300 virtually controlled the manufacture of glass in the United States, through its own strength and its dominance over similar organizations. It not only controlled the entire industry economically, but to a large extent commercially as well, for the manufacturers of glass did business or not, according as they agreed and cooperated with Local No. 300.

In a fashion the employers of these men were glad to meet their terms, for these skilled craftsmen held to the doctrine of handing on the craft from father to son and maintained the ancient guild standards in excellence of work. By 1900 the organized workers in window-glass manufacture held a position of power and prestige that remains to this day unique in the labor history of America.

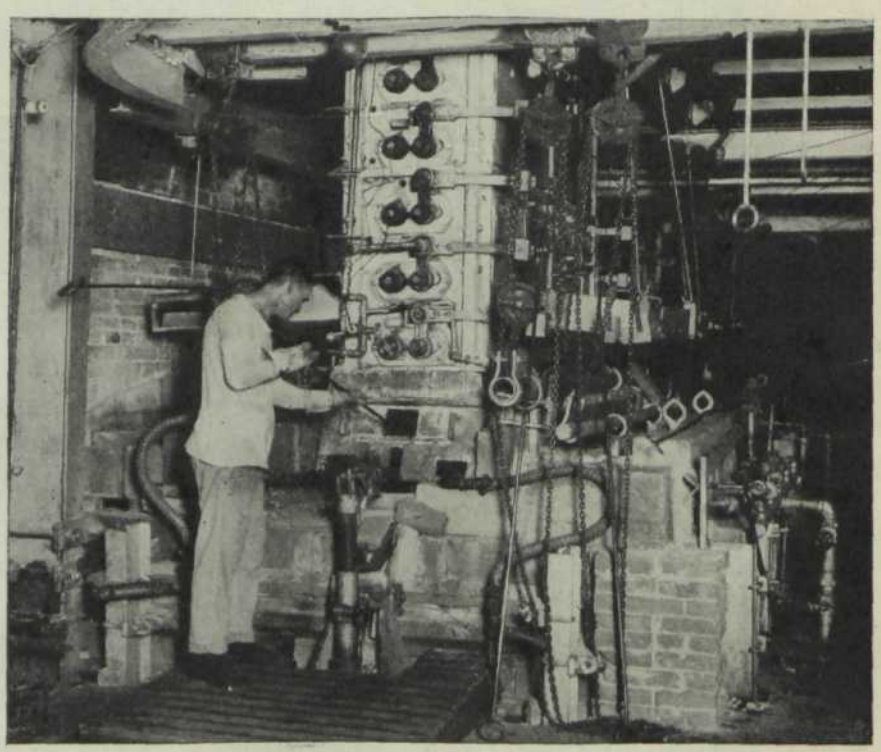
From 1881 and on these glass workers won every strike they undertook, and their wages rose progressively from year to year, until they became the highest paid workers in the United States.

Up to 1900 the history of Local No. 300 is that of a strong organization of exceptionally skilled workers with organizing ability sufficient to maintain them in a position of commanding economic power.

In this they were aided by the fact that, by the very nature of the industry, great skill and a long apprenticeship were necessary. Organized control was thus not only possible but was highly advisable, because it benefitted not only the worker but his employer as well.



On the first floor of the modern factory is a furnace where the raw material is melted preparatory to being drawn into sheets



Four machines like this draw the molten metal from the furnace and start the flat sheet of glass slowly upward toward the annealing oven

The number of glass workers was always strictly limited, and they were all union men. Only by accepting the trade agreements of the union and working in harmony with it could a manufacturer be assured of manning his plant. At the same time the manufacturer was safe in the guarantee that his workers would be men of the highest skill and producing capacity.

In 1899 and 1900, expansion of the industry and increase in the number of manufacturing plants resulted in a scarcity of workers. Naturally this increased still further the power of Local No. 300. Indeed one considerable concern, the American Window Glass Company, to place itself in position to obtain the needed force of skilled workers, made a contract with Local Assembly No. 300, by the terms of which a block of stock, of half a million dollars par value, was placed in trust for the union. Union representation sat on the company's board of directors.

In return for this, the transaction stipulated that Local Assembly 300 should provide the corporation an adequate number of skilled men to run its plants to full capacity.

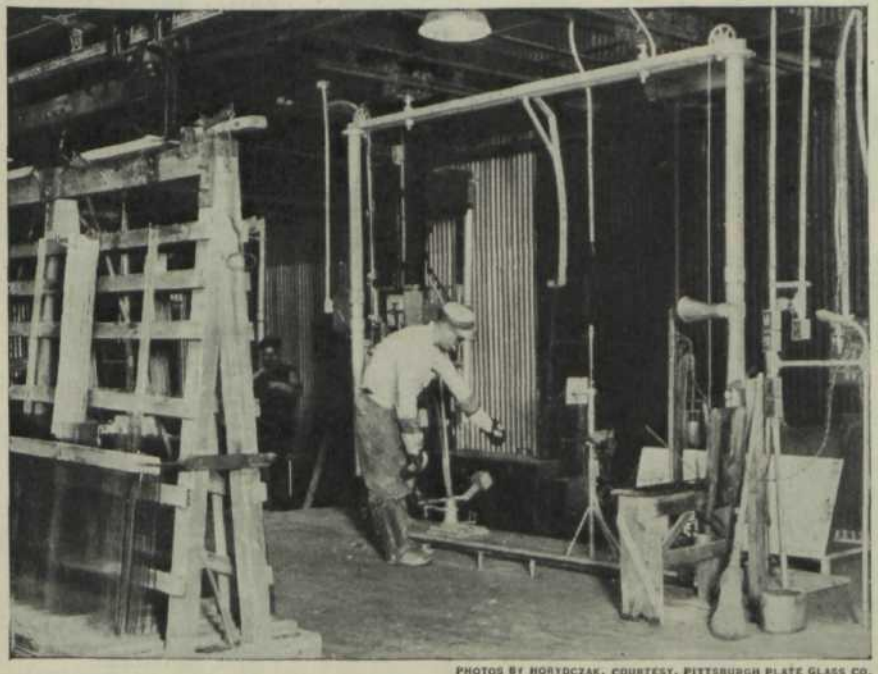
No American labor organization had ever received such tribute to its power, yet the attempt to carry out this agreement proved the rock that finally split the union and led to the forming of another organization. Had it not been for this rupture in Local 300, independent manufacturers of glass would have been deprived of a large proportion of their workers. As it was, the new organizations manned their plants, and in no great while Local No. 300 was unable to meet its part of the agreement with the American Window Glass Company, and was obliged to forfeit its stock and its representation on the board of directors.

This was the first wave of the tide that refused the command of Canute to recede.

The rift in the craft organization continued. Some years passed before it was possible to reform a unified four-trade body, and never afterward all window-glass workers grouped in a single organization. The dual unionism which grew out of the dissensions within the old Local No. 300, after its 20 years of conspicuous success, still lives.



The cooling sheet of glass is pulled slowly upward through the annealing oven by mechanically operated asbestos rolls



PHOTOS BY HORYDCZAK, COURTESY, PITTSBURGH PLATE GLASS CO.

Finished sheet glass emerges from the annealing oven on the third floor. The sheet is automatically cut into desired lengths

Could not see changes

THE DISSENSION grew because the tide of forces was growing against the old-time domination. Developments in industry quite unforeseen in 1900 brought it about. In 1908, by the time the warring groups had composed their differences and amalgamated as the National Window Glass Workers, something of immense importance had happened. The first machine for making glass had appeared. The tide against King Canute had risen by another, and this time a mighty wave.

Nevertheless the National Window Glass Workers stood by the original motto of "No Surrender." They refused to see what a revolution this glass-making machine represented. They declined to believe it would work, at least on any scale, and not content with setting their faces against it, they refused to admit workers in machine plants to membership in their order. The result was that the skilled workers in the machine plants—the flatteners and cutters—stuck to the organization they had already formed among themselves in the plants of the American Window Glass Company, the first establishment to be converted to machine production.

It happened that the new machine

used by the American Company "drew" the cylinder of glass, and this displaced only the gatherer and the blower. The cylinder still had to be flattened and cut in the same manner as the hand-blown product, and in the machine plants this work had still to be done by hand as in the old plants in the days of hand production.

Although machinery had at last gotten a toe-hold in the glass industry, the amount of handwork still to be done was such that the National Window Glass Workers were able to increase their membership and gain a position of control and prestige over the hand manufacture of window glass quite comparable to the former power of the famous Local Assembly No. 300.

By 1910 the wage committee of the newer organization was negotiating with the wage committee of the manufacturers and evolving a wage scale and working rules that became uniform throughout the industry. The old policy of controlled production and regulation of the working season was reestablished.

Such was the strength of this new union that any member who went to work in a machine plant automatically suspended himself from membership in the union, and could only return to membership and to employment in a hand plant by paying a fine and a reinstatement fee. They drew a rigid line between hand and machine workers, and insisted that workmen should identify themselves as definitely hand or machine operatives.

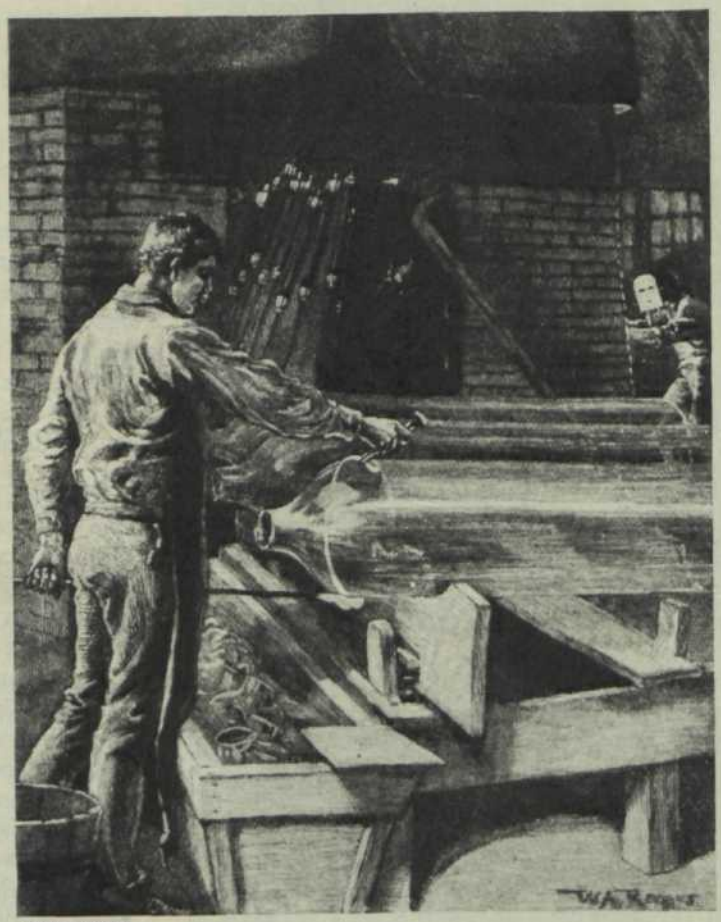
Forced opposition to unite

DURING this period the union refused a scale to any manufacturer who sought to operate under both systems. This meant that the manufacturers also were obliged to align themselves as definitely machine or hand concerns, since no blower or gatherer could work in a plant which had no scale and still keep his union standing.

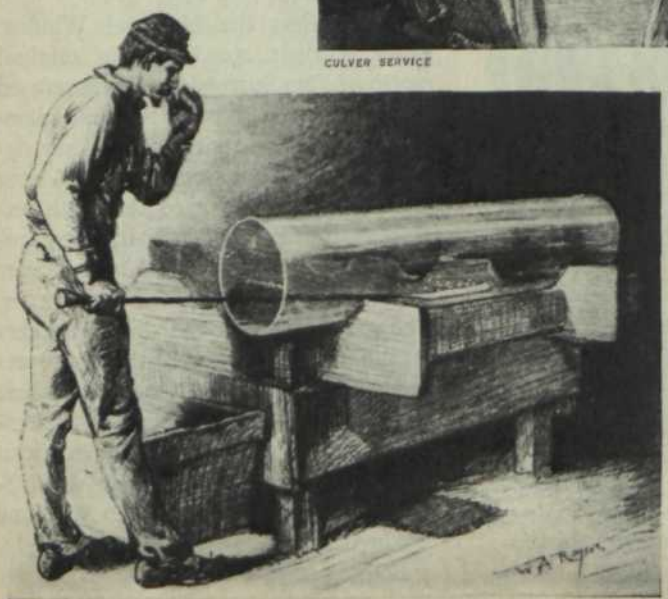
Seven years later the tide rose again against Canute. In 1917 the second piece of machinery invaded the glass industry —the sheet drawing machine, which displaced the first mechanism for blowing cylinders. This new machine, by making glass in the form of a flat sheet instead of a cylinder, displaced the skilled trade of the flattener.

By 1922 the machine plants had begun to encroach heavily on those still devoted to hand manufacture. Considerable numbers of workmen, once highly skilled in the hand manufacture of glass, had begun to see the rising tide, and had no intention of trying the hopeless experiment of pushing it back with a broom.

They began entering the machine plants in spite of their union's decree, and many hand manufacturing plants, losing their old employes, and unable to meet competition from the machine establishments, were obliged to close down.



CULVER SERVICE



The snapper squared the end of the cylinder and slit it open ready to be flattened into a pane of window glass. The union never admitted the snapper to membership

Too proud to yield

THE farsighted union men who saw the drift of the times did their best to convince their organization that to survive at all, it must do as a whole what they were doing individually, adjust itself to changing conditions and expand its field to take in operatives in the machine manufactories.

But a resolution shaped to that end, and giving the union jurisdiction over semiskilled and unskilled labor in the machine branch, while retaining the skilled handcraftsmen, was decisively voted down in a referendum. The proud hand workers of the old order, as they had repeatedly acted toward the despised snappers throughout the history of their organization, declared once more that they were a handicraft guild, and would so remain.

The blast of 1924-25 was the last blown under the

(Continued on page 176)

TODAY'S enormous combinations of capital are a natural industrial development. Big business must have big units. But size alone does not mean strength. The biggest merger may be doomed to failure if certain simple but important rules are not observed



The giant combinations of today are the natural progeny of the three centuries of our industrial and commercial evolution

Factors Which Make a Merger Sound

By DWIGHT T. FARNHAM

DECORATIONS BY BEN KIDDER

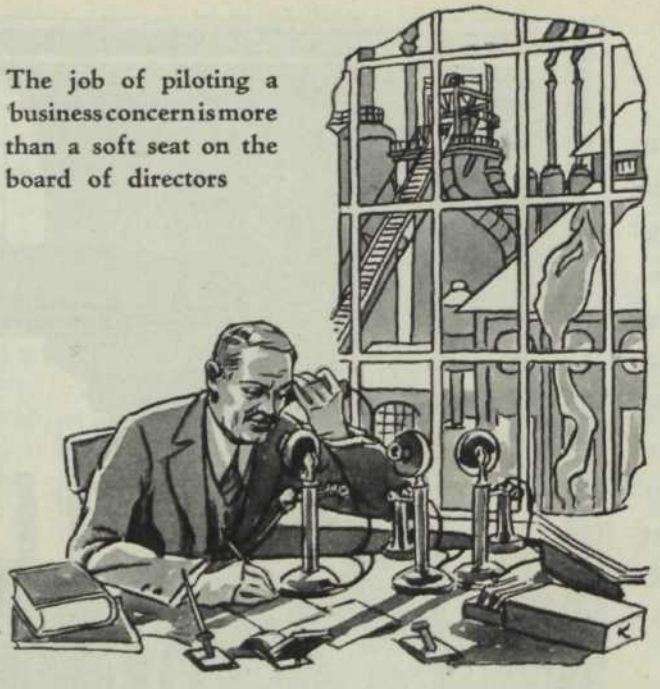
IT is a commonplace commentary that Americans are a nation of "joiners." Foreign and domestic observers have lauded and lampooned our irresistible itch to combine and to affiliate. The fruits of this inclination are readily apparent in our lodges, our luncheon clubs, our leagues for one cause or another, our federated churches, our labor unions, our golfing groups, our industrial and trade organizations and our agricultural cooperations.

This genius for expressing a unity of purpose gives a characteristic form and substance to the social texture of our civilization. Combination consciousness is an American birthright, for it proceeds from a natural instinct.

As far back as we have been able to illuminate the past with the lamp of history we have found that not only man but animals have combined on a basis of common interest to push back their horizons and to relax the handicaps which press upon all life in its struggle for existence.

The concentration of capital and plant resources is nothing new in our business practice, and any notion that combinations are a novelty which has been presented in the present stage of our economic development is sheer nonsense. We talk about the huge capitaliza-

tions of current combinations, but when the United States Steel Corporation was put together in 1901, its resources seemed as sizable to the America of that day.



The job of piloting a business concern is more than a soft seat on the board of directors

Chains are not new

WE hear much about chain stores, but the Great Atlantic & Pacific Tea Company was incorporated back in 1901, and began its steady growth I don't know how many years before. We read of current legislation and litigation with regard to railroad consolidation, yet our great trunk systems already represent the absorption of hundreds and hundreds of smaller lines, the Pennsylvania, for example, having taken over some 600 lines to complete its present system.

It is true that the earlier combinations gave little suggestion of the spread of the movement into virtually all fields of business, but I can see no occasion for sensationalism or hysteria over the evidences of a natural trend which we are observing in our own day and generation.

I know of no way by which this instinct—or any other instinct, for that matter—can be exterminated by legislation, although that is the means regularly proposed by those who profess to see a national danger in the contemporary expressions of this trend toward combination. In a democracy, effective legislation and satisfactory enforcement depend upon, and vary with, the ethical standards of the majority. I believe that as long as the human race exists there will be combinations.



And as long as business is done primarily for profit, combinations to increase profits will be formed.

Whatever the social implications of this native urge toward combination, newspaper headlines are daily reminding us that the movement has been tremendously accelerated in the business field. Mergers, mergers everywhere, and not much time to think of their significance. We are impressed with the millions involved and the mighty names behind them.

It is not so easy to perceive that these current combinations are merely the bright flowers of our economic growth—the tall exclamation points that accent our national progress—the natural progeny of the three centuries of our industrial and commercial evolution. The labels we have contrived for our combination complex may be new. Yet the principle is as old in application as the first alliance made by men of the Stone Age.

We have gotten to the present stage of combinations because of our enormous mobility of mind and matter. No one can fail to realize that life is lived at a faster and faster tempo. The briefest glance at the developments of our communications and transportation systems would indicate the enormous increases in ease and speed since the Civil War. The tremendous gains made within the last few years provide their own emphasis for attention.

The point I want to make is that the present celerity of the combination movement is only the harmonious accompaniment of the quickened life of an active and enterprising people.

Just consider these recent changes in our commercial and industrial structures. Per capita wealth increased 67 per cent from 1900 to 1912, and 50 per cent from 1912 to 1922. Chain-store sales have risen so rapidly that the future of the independent has become a national question. Electric power production rose 68 per cent from 1922 to 1927, and the electrification of manufacturing plants went from 60 per cent in 1923 to 75 per cent in 1927.

Enrollment of college students expanded 121 per cent from 1910 to 1920, and 75 per cent from 1920 to 1926, and —as I happen to know from personal contacts with the universities—a considerable part of this wholesome curiosity about life was directed to courses in the administration and practice of business.

The general business slump in 1920 resulted in an immense increase in economic consciousness of the whole public. All classes wanted to know just what had happened to them and why, so that if possible it might be prevented from ever happening again. In the ten years after the war, literature on business, industry, finance and economics showed a large increase in circulation. Financial services multiplied, business counsellors opened shop and found a profitable and eager patronage.

The war also stimulated interest in the science of management. Driven by increased demand and lack of man power, nations scrapped tradition and sought the better ways to produce. Knowledge and resources were pooled. Governments effected industrial combinations of a sort which exceeded the widest range of the imagination. The world learned to cooperate and the public became "combination conscious" on a world scale.

Education in economics, in management, and in the value of combination naturally stimulated combinations. This education also stimulated speculation. Speculation has in turn stimulated further education.

Our times force mergers

SUCH unprecedented increases in ease and speed of communication and transportation, in education, in economics, in management, in finance, and in the value of combinations, could only result in great animation of the combination movement. On a basis of time consumed in communication and transportation, continents are now closer together than contiguous counties were in former times. The war demonstrated the value of alliance and the interchange of information.

The underlying course of the move-

ment toward combination is pertinently suggested by John C. Orcutt, vice president of the Irving Trust Company of New York.

"It is to be found," he said, "in the great increase in the mobility of population, and in the fact that an ever growing number of people are coming to have a world-wide hearing and vision."

Big as some combinations seem in sheer weight of capital and resources, the combination as an economic necessity to meet the complexities of twentieth century business is still on the threshold of potential growth. Contrary to some inspired explanations, combinations are not fabricated in mysterious back rooms by hard-boiled bankers.

As a matter of fact, the combination as we know it today could not have been put together 20 years ago. The public did not know how many more things it could want and use to good purpose, and our circulation of goods and services was rather sluggish by present standards. Even the genius of a Morgan, a Hill, or a Harriman had to gauge its vision according to the state of the public mind and the facilities available.

Big business needs bigger men

WHILE it is demonstrably true that the theory of combinations is sound and there is good reason to expect them to increase in size and scope, there is no mysterious panacea in the economic policies which dictate their formation. Like anything else that is to endure usefully, they must be solidly constructed and brought into existence in response to a genuine need. And let me say right here that the job of piloting a going concern through the reefs and shallows of business is something more than a soft seat on the board of directors.

Disadvantages may outweigh the advantages of industrial combinations, and failure is likely to result unless the situation is thoroughly investigated before a combination is formed. Facts about the business under consideration and its relation to other businesses are of paramount importance. This is the day of the statistician, the accountant, the analyst. I could name a dozen men who have risen to the presidency of their companies because of their knowledge of essential facts.

This expanding regard for the control of business through information on the state of its economic health has been aided tremendously by the wealth of business news now regularly available in highly specialized form and subject matter. We get interpretation as well as report. The quality of the editorial leadership that is focussed on the business field is assurance that America will never become a nation of economic illiterates.

Weaknesses which imperil the success of combinations are well enough known to be avoided. One of the outstanding sources of trouble is the failure to analyze the situation with sufficient care —the failure to establish beyond a reasonable doubt a real economic reason for the proposed combination. Ignorance of the essential requirements of successful combination is another cause of distress.

Some combinations are formed in spite of these requirements by persons interested in immediate gains—promoters concerned principally with the profits of financing or ambitious executives who want to increase their power or prestige, regardless of consequences. The acquisition of control by persons constitutionally unfit as administrators has nullified the opportunities of many a combination.

Or there may be the social complex which supports its superior power by childish belittlements of the workers' positions. "Office politics" is bad business, of course, but it sometimes takes a new combination several years to settle the vital question of who will be king. Meantime the business staggers along as best it can under the confusing edicts of the warring barons.

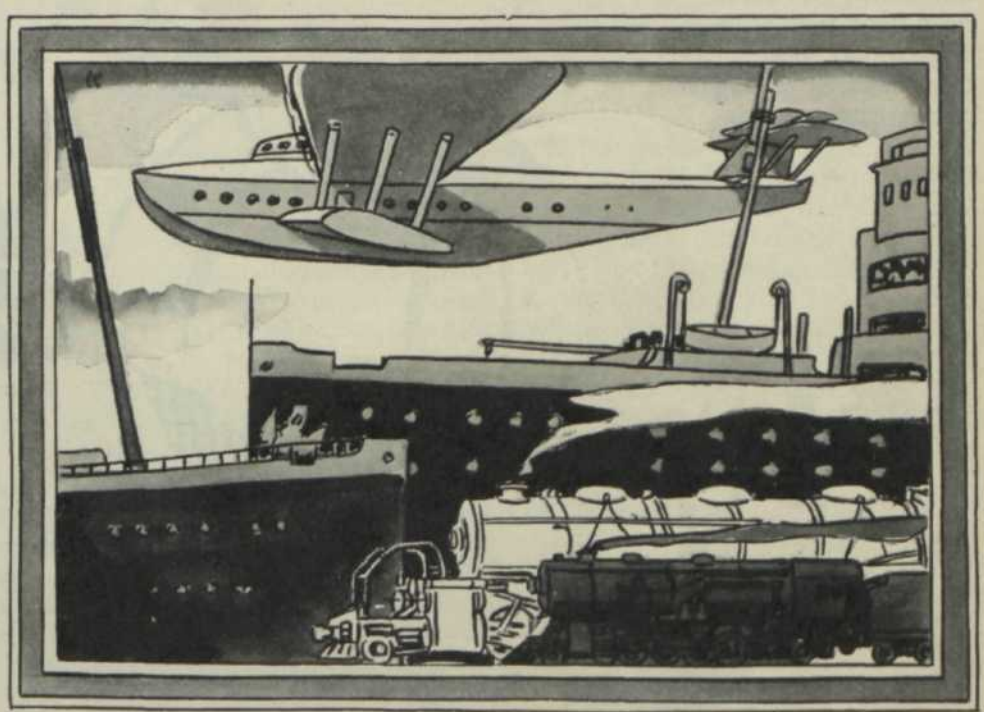
Keep apace with research

FAILURE to improve products and methods in accordance with modern practice and demand is usually fatal. It should be added that research is essential to large-scale production. Nowadays every great corporation finds it worth while to keep an eye on science and invention either through its own staff or through arrangement with one of the great independent laboratories. Government specialists have played a useful part in advancing the technology of business.

Inasmuch as most of the disadvantages connected with industrial combinations are present to a considerable degree in the business owned by one man, the evidence is preponderantly on the side of combinations. The proof of their success is found in the rapid increase in the combination movement and in the success of the principal industries of the country.

Several types of combination have justified their existence by aiding industries in which they are operating. One

(Continued on page 83)



The briefest glance at our communications and transportation systems indicates the enormous increases in ease and speed since the Civil War

Will Chains Make Factories

By H. M. Foster

Editor, Food Department, Journal of Commerce, New York

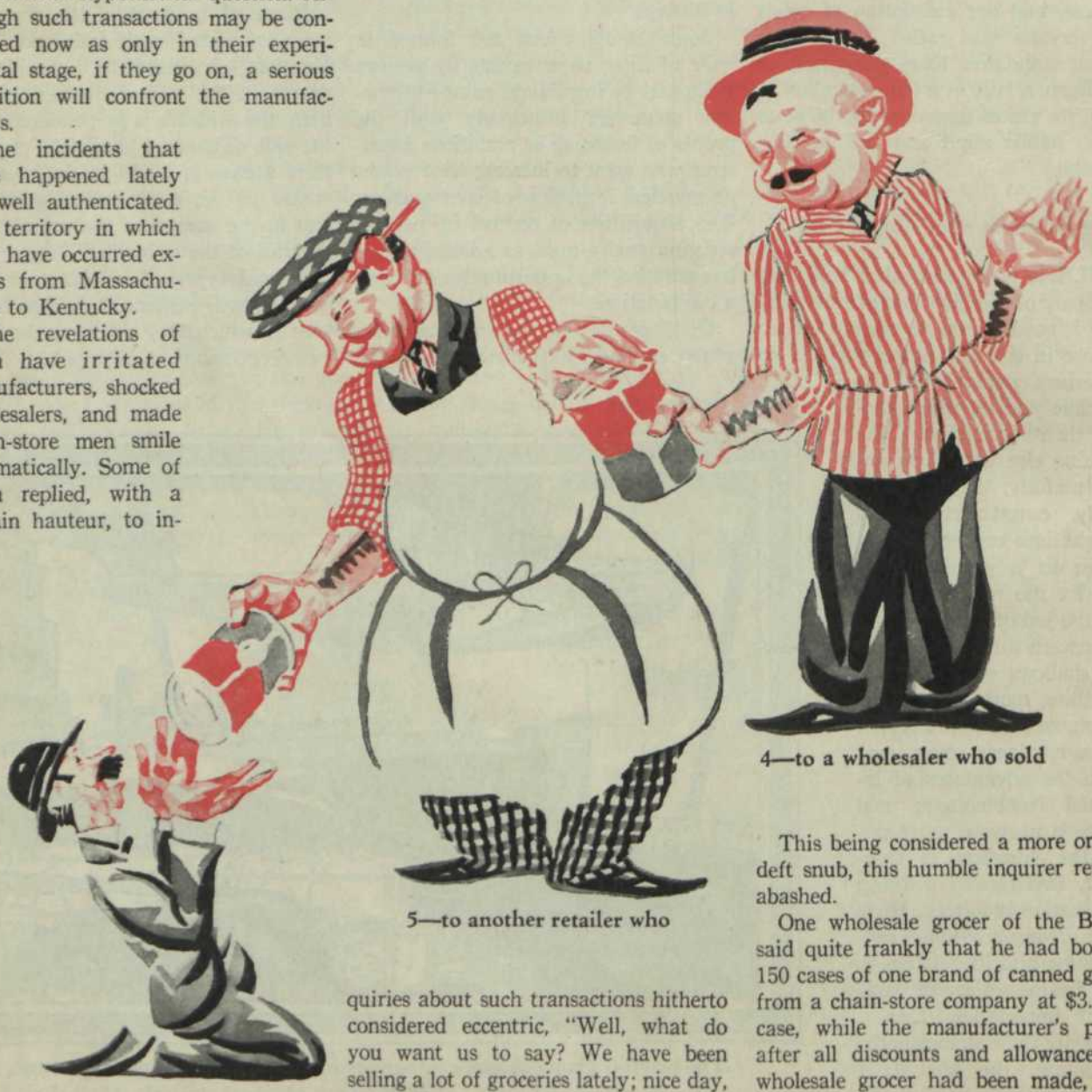
THE manufacturer has held an important place in the economic scheme but, if the conditions reported in this story become general, it is evident that he must rapidly become subordinate and merchants must revise all their merchandising ideas to meet a strange commercial phenomenon

MANUFACTURERS are likely soon to become mere employees of the great chain-store companies. Some will survive only at the pleasure and wages extended to them by the chains.

What are manufacturers going to do to counteract the sales by chains of nationally advertised products to wholesalers and retailers in small lots at prices lower than the manufacturers charge others for car-load lots? This is not an academic or hypothetical question. Although such transactions may be considered now as only in their experimental stage, if they go on, a serious condition will confront the manufacturers.

The incidents that have happened lately are well authenticated. The territory in which they have occurred extends from Massachusetts to Kentucky.

The revelations of them have irritated manufacturers, shocked wholesalers, and made chain-store men smile enigmatically. Some of them replied, with a certain hauteur, to inquiries about such transactions hitherto considered eccentric, "Well, what do you want us to say? We have been selling a lot of groceries lately; nice day, isn't it?"



4—to a wholesaler who sold

5—to another retailer who

6—sold to the consumer

This being considered a more or less deft snub, this humble inquirer retired abashed.

One wholesale grocer of the Bronx said quite frankly that he had bought 150 cases of one brand of canned goods from a chain-store company at $3.85 a case, while the manufacturer's price, after all discounts and allowances to wholesale grocer had been made, was $4.00 a case in car-load lots. He de-

Their Slaves?

CARTOON DECORATIONS
BY LOUIS FANCHER



1—The manufacturer sold

2—to the chain which sold

3—to a retailer who sold

Observe this curious route of distribution, reported by a New Jersey wholesaler, taken by one brand of goods from manufacturer to consumer

clared that salesmen of the chain called at his office regularly, soliciting his business on a delivered basis.

Others said they had bought packaged fruit at $4.20 a case in small lots, packer's car-load price was $4.70 a case; and breakfast food in small quantities at $3.00 a case, when the manufacturer's car-load price was $3.15.

What channel of distribution?

A WHOLESALE grocer in New Jersey, on reading accounts in the trade press of these transactions, wrote that they did not amount to much in comparison with his experience, which had carried him one step further. He had bought canned goods in quantities as small as five- and ten-case lots and from some of his own customers, who said that they had bought the goods from a chain-store company. He then sold the goods to other customers of his, who, of course, resold them to consumers.

The novel and devious route in distribution of this merchandise, therefore, was from the manufacturer to the chain, to the retail grocers, to the wholesale grocer, to other retail grocers, and then, at last, to the public.

Whether or not the manufacturers or the chain-store concern made any profits on the goods is of course known only to themselves; but the retailers of the first group declare that they made money in selling to the wholesaler and he says that he made a profit in selling to the second group of retail grocers and they, in turn, are said to have sold at their usual prices to housewives.

When the stories of these strange and unusual selling adventures were told to the sales managers of some of the manufacturing companies named, the replies and comments were quite as strange and unusual. The New York manager of the breakfast food company referred inquirers to the Chicago headquarters and the executive there wired back that he knew nothing about anything of the kind and suggested asking the New York office.

They don't admit it

A SECOND attempt on the metropolitan stronghold brought nothing more than the opinion that the whole thing was bosh, with the comment that the New York manager did not believe a word of it.

The sales manager of one of the largest, if not the largest, of the food manufacturing companies in the country said that he had never heard of anything of the kind. He recalled sales by managers of chain stores to retail grocers and considered such sales not at all unusual. However, he said that as far as he knew sales of that kind had consisted only of an odd case or so at a time and had been distinctly sporadic.

He remembered, as did a good many other persons consulted, that as far back as 1920 and 1921, the years memorable to many manufacturers and merchants for the great decline in prices, that a chain company had sold various kinds of canned foods to anyone and everyone who came into its stores, retail grocers included, cheaper, quantity for quantity, than wholesale grocers could buy the same goods in car-load lots from the manufacturer in San Francisco. Of course, the cost in the East included the transcontinental freight. But, however

remarkable those sales may have been considered that time, this sales manager thought these new transactions more so, not merely as examples of cut prices or as indicative of secret rebates, both of which themes were old enough as trade topics, but as a novel deviation from the established channels of distribution.

This important manager of sales was decidedly skeptical. He seemed to think the whole affair mere gossip. But when he was told that orders, delivery slips and checks had been shown, he said he would ask some friends who were high officials of the chain about the matter and would later give a report of what they said.

A short time later he declared that they denied any knowledge of anything of the kind. They scouted the whole story as just more evidence of the envy, hatred, and malice, and all uncharitableness toward their company.

They said that if any such transactions had occurred, and they doubted that they had, they must have been due to the ambition of a few store managers, who were eager to win prizes in sales contests.

Of course these officials explained that they had no way to prevent the store manager from selling anyone who came in and that it was difficult to identify a retail grocer, or a wholesaler for that matter, by his clothes.

But the investigator was persistent and his curiosity was piqued. He asked if such quantities of such commodities were not a rather unusually heavy stock for a single store. He was bold enough to ask how the sales manager accounted for checks drawn to the order of the chain company and endorsed, but at that question the sales manager demurred.

Point not clearly shown

THEN THE questioner asked how a manager of a chain store could deliver 150 cases of canned goods on his shoulder, and the sales manager replied that he was sorry to have to end the interview but he had to catch a train for Chicago.

The sales manager of the manufacturer's selling agency expressed indignation at the publication of the reports—"even if they could be supported by facts," as he put it—of these unusual transactions.

His indignation was based on his contention that "the plain inference to be drawn from such reports was that the largest distributors were receiving preferential discounts from the manufacturer." Declaring that "it has been recognized for many years that the company has been undeviating in its policy relative to standardization of prices," the company issued the following public announcement:

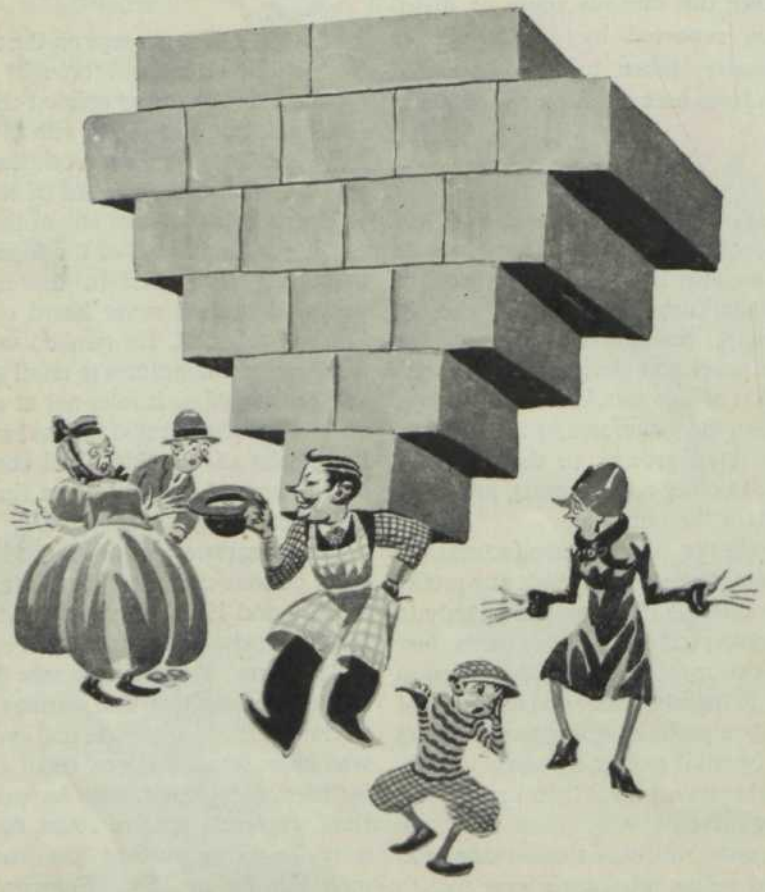
> In response to your inquiry by long distance telephone, there has been no change in our policy governing the uniformity of our prices, nor will any change be considered. We regard as fundamental the policy which provides that all of our distributors whom we supply direct may own our goods at exactly the same net cost.
>
> Our prices, published from time to time and quoted to all of our customers, are uniform regardless of the quantity purchased. There are no special allowances, refunds or other forms of advantage given to individual customers under any guise whatever.

In reading this statement it should be noted that, although the phrase, "if they could be supported by facts," obviously is intended to cast doubt upon the genuineness of the transactions reported, there is no attempt to refute their actuality.

Yet the company's salesmen undoubtedly visit frequently the wholesale grocers who said that they had made such purchases and, it may fairly be assumed, are on terms of sufficient familiarity with those merchants to be able to verify or deny the reports.

But the statement "Our prices, published from time to time and quoted to all of our customers, are uniform regardless of the quantity purchased," is an important one.

Its importance lies not only in the declaration that prices are the same to all customers, but also, and with greater significance, in the statement that differences of quantities are ignored. If wholesale and retail merchants generally could be assured of this, much present uneasiness, not to say discontent, would be eliminated.



How could the manager of a chain store deliver 150 cases of canned goods on his shoulder?

They are silent under proof

TO DEMAND documentary proof is risky. It proved so in the case of the manufacturers. When orders, delivery slips, other memoranda and especially checks drawn to the order of the chain company and endorsed were shown, the hitherto scoffing sales managers became strangely silent.

The charge of sensationalism made by one sales manager against a conservative business newspaper for publishing the news of these unusual transactions an-

(Continued on page 186)

★ **Two boys needed rapid transit for a home colony they had created so**

They Turned A City Around

By HERBERT COREY

IT IS a simple story. An incredibly simple story. Looked at from this end Oliver Optic might have written it. One thing led on to another. Progress was based on the earlier maxims. Work and Win. Save and Succeed. Honesty is the Best Policy. There is something old-fashioned about it. One would almost say the Van Sweringens got started and could not stop. Note the line of progression. There is something of the inevitable in it.

They needed rapid transit for the home colony they had created east of Cleveland.

But they had no place for a downtown terminal.

So they bought the Nickel Plate Road which owned the property they wanted.

Because they owned the road they were compelled to make it pay. Otherwise it would have bankrupted them.

When it began to pay they were compelled to gain control of other roads to fortify their position.

Now they have enough roads to make the fourth great eastern



Oris P. Van Sweringen



Mantis J. Van Sweringen



TERMINAL TOWER, CLEVELAND PHOTO BY HORYDCZAK

WHEN two men set out to change the trend of a city's growth, that is ambition. If they accomplish it, that is success. If, to improve their real estate holdings, they establish a railway system that overshadows the original purpose, that is a good story



PHOTO BY HORYDCZAK

FRAMED in the steel work of industrial Cleveland and peering over the Arts Building to which it is connected by a series of tunnels, the Terminal Tower stands to confound those who scoff at the ancient adages, "Work and Win," "Save and Succeed." It is a chapter Oliver Optic might have written



Buyers of lots in the 10,000 acres of Shaker Heights cannot erect just any type of home they choose

system, which they are asking the Interstate Commerce Commission to authorize.

Quite incidentally they have become millionaires. All in 20 years.

Simplicity isn't the explanation. The success of the Van Sweringens was not a series of inevitabilities. Genius was there. Other men say they can see a long way down a gun-barrel. The fact becomes apparent to the other men a long time too late. It is then very apparent indeed.

No one would have believed that the current of a city's growth could be reversed by two young men. Yet that is what has happened to Cleveland, greatly to Cleveland's betterment. Suppose we tabulate the known facts. What there is of explanation may follow in due course.

Oris P. Van Sweringen is 50 years old. Mantis J. Van Sweringen is 48.

They were born in Wooster, Ohio, of a family neither rich nor poor. The western reserve is filled with such self-respecting families. Their members have a regard for the law, they reverence education, they are industrious and mildly enterprising, they do not covet riches nor hanker for authority. Such people are the backbone of the republic.



PHOTOS BY HOKYDCZAK

Twenty years ago the land where these new apartments stand was inaccessible. Now it is a select development

When they were youngsters the two boys came to Cleveland. It is probable the elders of the family went with them, but I frankly do not know. No information is ever given out by the Van Sweringens. They hold rigidly to the conviction that a man's private life is his own business. I do know that they had only the education obtainable in the Wooster High School and that they began as operators in real estate.

Here I shall deal a little in fancy. It is not probable that they had any capital at all. Yet as they went on they created a clientele which was more valuable than credit at the bank. O. P. Van Sweringen seems always to have been a student of maps. Lines that would mean nothing to another man were fingerposts to future values.

East of Cleveland lay Shaker Village. Young folk drove out of a Sunday to see the quaint old place. Farther east was the thriving city of Youngstown. The Van Sweringens believed that the true line of growth for Cleveland should be toward Youngstown—through Shaker Village.

They bought property on the edge of Cleveland and profited by the development of a residential suburb. Let me

(Continued on page 116)

Insurance Counselors to Business



William Brosmith
Vice President, Travelers Ins. Co., Hartford



P. W. A. Fitzsimmons, Chairman
President, Michigan Mutual Liability Company, Detroit, Mich.



Walton L. Crocker
President, John Hancock Mutual Life Ins., Boston



Julian S. Myrick
Partner, Ives and Myrick, New York City

INSURANCE, an integral part of our economic structure, is represented in the Chamber of Commerce of the United States by this group. In its membership are found both leaders in the insurance business and policyholders. It serves in an advisory capacity to the Insurance Department of the National Chamber.

Its primary purpose is to convey to business a better knowledge of the fundamentals of insurance and to aid the Department in bringing before the insurance business views of policyholders on matters of mutual interest. Attention also is given to inculcation of health and property conservation habits throughout the nation.



F. Highlands Burns
President, Maryland Casualty Co., Baltimore

★



R. P. DeVan
President, De Van & Co., Charleston, W. Va.



F. T. Moses
President, Firemen's Mutual Ins. Co., Providence



C. A. Ludlum
Vice President, Home Insurance Co., New York City



Wm. D. Winter
Vice President, Atlantic Mutual Ins. Co., New York



L. A. Lincoln
First Vice President, Metropolitan Life Ins. Co.



W. H. Sawyer
President, Stevens & Wood, Inc., New York City



J. S. Kemper
President, Lumbermen's Mutual Casualty Co., Chicago



S. S. Huebner
Wharton School of Finance and Commerce, Philadelphia



J. G. Leigh
L. B. Leigh & Company, Little Rock, Ark.



DR. R. J. McFALL

IN A general way you know that the distribution census is to aid business. But do you know how it will aid your individual business? How you can apply the facts it will uncover? After all that is the important question and the one Dr. McFall answers in this informative article

The Distribution Census and You

By DR. R. J. McFALL

Chief Statistician for Distribution, U. S. Census Bureau

TO BE of maximum value to manufacturer, wholesaler, retailer and consumer no commodity can rest at any one place for any great length of time. Quick turnover is essential in a good, healthy business but how quickly certain commodities turn over or where they turn over best or even through what channels the turnover is made are questions which few, if any, in the business world can answer.

If this information were known the census of distribution which the Bureau of the Census will undertake in 1930 would be unnecessary. The question uppermost in the mind of every business man who has given the distribution census a passing thought, is "What can the census tell me about my business that I don't know already or that I need to know?"

Use of the information

THE answer is easy or difficult, depending upon the business. If it is automobiles, the reply undoubtedly would be "Not much," as the manufacturers have this distribution information well under control. If it is, say, shoes that is a different story.

Let us take shoes and a census of the distribution of shoes as a working example. Shoes are a good commodity to select. Almost every one buys one or more pairs a year.

In the first place, let us find out just what information on the shoe business is already available. Not much, we learn, and, for what there is we must thank the manufacturer.

We are told that $500,000,000 worth of raw materials annually make $1,000,000,000 worth of shoes which retail for

approximately $1,500,000,000. We learn, also, there are 1,357 manufacturers of shoes employing some 208,000 workers and disposing of their products through 160,000 retail channels.

Now what does the average shoe retailer know about the important facts of his business?

Peter Jones runs a shoe store in a thriving community of 10,000 inhabitants. Mr. Jones knows he will sell some high shoes in winter and mostly low shoes the year around. He knows that the young bloods like sporty, two-colored shoes just after the roses bud in early summer.

He guesses he will probably need so many tans and so many low blacks at certain seasons and orders accordingly. He knows that Deacon Smith wouldn't pay more than $3.50 for a pair of shoes if they had gold tips. He knows that Aunt Emma Brown will come in for a pair of high buttons as regularly as the snow melts in the spring.

Is Jones above average?

BUT Mr. Jones, shoe retailer, does not know whether he is doing the amount of business he should; whether his clerks are making as many sales as the average; whether his sales are as good as or better than those of the average small-town shoe store, or even whether the shoe trade in all small towns is going to the bow-wows in these days of fast automobiles and little walking.

Now this is where a census of distribution, properly applied and intelligently interpreted will help.

The 1930 census, when completed, will show Peter Jones whether his clerks are doing as well as other clerks; if other stores are making money out of side lines; the other channels through which shoes are retailed, and if he is doing as much business as the average shoe store in his type of community.

All of this is highly important to Peter Jones as he will realize when he looks over the distribution information.

What do the manufacturers of shoes and the wholesale houses know of distribution or stocks on hand in retail stores? Little, if anything. Most of their information is obtained through guess work by bright and observing salesmen.

The manufacturer knows how many pairs of shoes he turns out in a year and how much it costs him to turn them out. The wholesaler knows his stocks on hand. Neither can estimate accurately retail stocks or public demands. New territory generally is selected by population or geographic location without

BUSINESS FOLK IN



CLIMBS THE LADDER
From humblest railroading jobs, V. V. Boatner has climbed to Chicago Great Western presidency



COUPLES RAILROADS
C. M. Newman, one of two to acquire Sante Fe and Orient roads, joining Mexico and Pacific Coast



MAKES DRINKS, TRUCKS
Making Coca-Cola wasn't enough for youthful Robert Woodruff. Now he also heads White Trucks



LONG SERVICE
G. T. Gwynne has been with N. Y. State Chamber for 35 years. He is now executive vice president



FOR ART'S SAKE
Max Epstein, Chicago manufacturer and philanthropist, gives city a million for art center



CHARTS AIR PLANS
Col. Paul Henderson, T. A. T. vice president, has hand in plans for a forty-passenger airplane service

THE MONTH'S NEWS



CHAIN-MAKER

Ernest Stauffen, Jr., of Marine Midland Corp., forms bank and trust chain in New York State



WON'T CONTEST

A. A. Mitten, new Mitten Management head, will let late father's employe-benefit bequests stand



ENGINEER HONORED

Ralph Modjeski, Polish born, is given the John Fritz gold medal for constructing excellent bridges



HANDLES HALF-BILLION

Thomas Hildt, Baltimore, is chosen to handle the Federal Farm Board's fund of $500,000,000



HEADS STEEL MERGER

Cleveland, Detroit and Weirton steel firms merge, with G. M. Humphrey, Cleveland, in command



PLUGGER

At 36, Harlow H. Curtice becomes the president of the AC Spark Plug Company, Flint, Michigan

definite knowledge of its buying possibilities.

For the manufacturer and the wholesaler of shoes the census of distribution will show:

Various types of stores which handle shoes.

Volume of sales for each type of store.

Whether or not it pays to send salesmen to visit certain types of stores.

Whether territory expansion is justified in particular communities.

Whether they should concentrate more on chain stores or independents.

The natural question of the consumer, who will bear the greatest part of the cost of compiling this information will be, "Will the information and figures gained through a nation-wide distribution inquiry bring down the price of shoes?"

The answer, I believe, is, "Ultimately, yes."

Manufacturers, wholesalers and retailers will be able to put their fingers on wasted time, energy and money. Elimination of such waste will lower costs of production, distribution and sales. With manufacturing and handling costs cut, competition will see to it that the ultimate consumer gets his share of the savings.

Learning new economies

SHOE wholesalers undoubtedly will learn many interesting things about their business. They may learn that calling on stores with an annual gross business of, say, $5,000 or less means red ink rather than black.

After the test census of distribution conducted by the Department of Commerce with the cooperation of the Chamber of Commerce of the United States in 1927, one Detroit wholesaler of electrical supplies realized this.

Before the census, the electrical company salesmen, when killing time between trains in certain small communities, had been in the habit of digging up small orders here and there. On the face of it, the small increase in business looked good, but the wholesaler soon realized that it was costing more than the profit to pack and ship the orders.

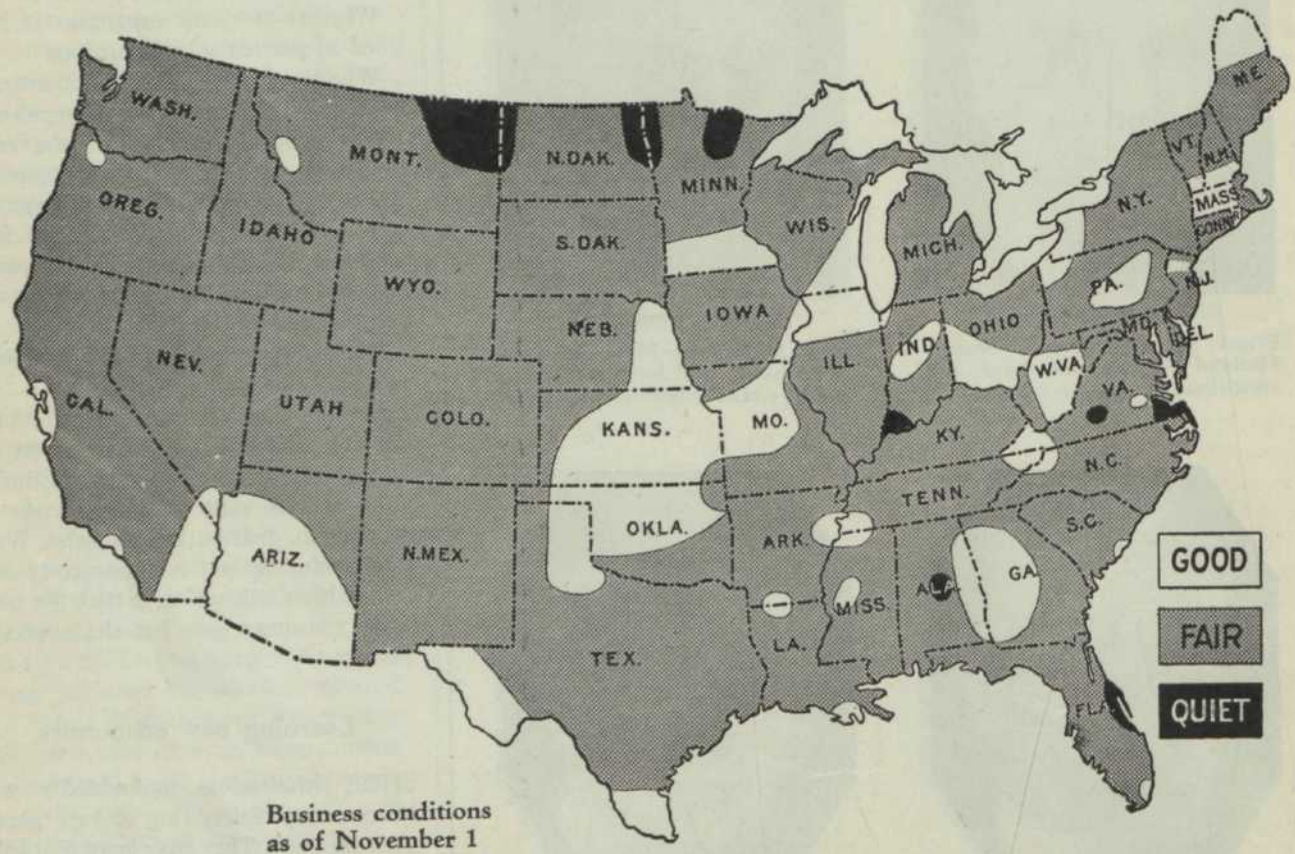
Consequently salesmen were given definite instructions on the stores they were to visit and ordered, if they were killing time between trains, to play pool or attend a movie at the company's expense.

The 1927 test census, which, luckily for this electrical wholesaler, happened

(Continued on page 104)

The Map of the Nation's Business

By FRANK GREENE
Managing Editor, Bradstreet's



Business conditions as of November 1

BUSINESS BETTER THAN USUAL

ALL in all, business generally maintained its better-than-usual level during October, this despite the gyrations on the New York Stock Exchange. Only a few changes will be noted on the map of November 1 from that of the preceding month and these consisted largely of minor readjustments of areas already "in the white." The major readjustments, perhaps, were made in Michigan, New York, Pennsylvania and Ohio. As between the East and West, taking the Mississippi River as the dividing line, light and shadow were fairly equally distributed

THE hesitation in business noted in these columns in September became slightly more marked in October. Just how much of this was due to the exciting events in the stock-market and how much to seasonal slowing of wholesale operations and industry is at this date as difficult to determine as to estimate just what share of the relative quieting was due to the improvement over a year ago on which current comparisons are based.

Wholesale and jobbing trade certainly eased off more markedly than did retail trade or industry, the latter, by the way, seeming to maintain a relatively more active pace than did dealings by first hands or by ultimate distributors.

Despite the visible quieting, however, there seemed in fact strikingly little difference in the scale of trade activity from a year ago, and industry as a whole still exhibited gains over October of last year.

Happenings in this latest stock-market debacle up to the time of writing seemed to follow the usual course, first, liquidation getting more urgent as October advanced; then panicky sacrifices of values coincident with enormous dealings; later a quick rally forced by support from banks and other financial interests, and, later still, a seepage of strength as those aided by the rally were ap-

parently enabled to realize on burdensome commitments and sell to the seemingly very numerous body of new speculators who took hold at very heavy concessions from the year's high levels.

There was, however, an almost utter absence of some of the phenomena which have distinguished other stock-market breaks in the past. The old-time currency scarcity was entirely absent, indeed the passing of the boom was accompanied by really easy money, that is five to six per cent for call money and six to seven per cent for time loans on collateral. The last week of the month, in fact, saw time-loan quotations drop slightly below the like date of the year before, something not witnessed for at least a twelvemonth.

While liquidation was heavy on several days, the peak was reached on October 29 when 16,410,030 shares changed hands. Although liquidation reached its peak on that day to the tune of hysterical selling, the break on October 24 was in some respects more acute in that bids for some stocks seemed absent at any quotation.

It was exactly 22 years before the latter date, by the way, that the 1907 collapse, occurred—a collapse stayed, however, by the breaking by J. P. Morgan of the 100 or 125 per cent call-money rate to ten per cent. The October break this year differed from that of earlier stock-market convulsions in that there were no failures on the New York Stock Exchange and likewise the crop of bank failures, for which 1907 and earlier years were distinguished.

Money rates fall

THE end of the acute phase of this particular slump was fixed by many as October 31, the day the Stock Exchange, firms and banks reduced margin requirements to 25 per cent, the Bank of England dropped its rate from six and a half to six, the New York Federal Reserve Bank lowered its rate from six to five per cent and the "brokers loans" statement showed a $1,096,000,000 reduction for the week, to the lowest level since June 19.

At the close of the week the Stock Exchange announced that loans had been cut $2,240,000,000, or by 40 per cent during October. The latter percentage resembles the amount of drop of the stock-market index numbers from early September to late October.

The break on the stock market on October 29 was coincident with a crash in wheat prices, said to have been forced selling, by those whose stock-market commitments were endangered. At one time wheat broke seven cents a bushel but rallied five cents with the weight of forced liquidations.

Wheat break noteworthy

OTHER grains did not share in this slump and the wheat break, evidently exigent selling, was in face of the announcement, made a few days earlier by the Farm Board, that it would lend money for the support of wheat prices as it had earlier done in the case of cotton. Regarding these two apparent departures from tradition it may be said that something like this was done in wheat in the war crisis and in 1926 when the record cotton crop was pressing on the market. But on no previous occasion, we believe, were the actual prices to be guaranteed, $1.12 to $1.25 in the case of wheat and of 16 cents in the case of cotton, specifically mentioned.

Some months ago, when the prospect of tariff legislation was cited as a possible temporary makeweight in business, it was said that the prospect of tariff advances did not of and by themselves necessarily carry any threat to trade. Today, with the prospect of tariff legislation greatly delayed if not perhaps postponed indefinitely, it is noted that the long delay has permitted very heavy imports to anticipate the new rates, the result being that some importers are reported to have cancelled some import orders. Exports and imports for nine months, the largest in each case since 1920, exceeded those for the like period a year ago by 8.2 and 9.4 per cent respectively.

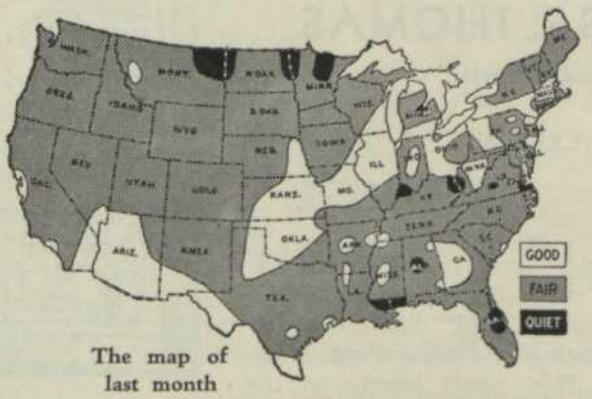
Cotton exports lower

COTTON shows the largest decrease in exports of any of the important products, next to this being crude foodstuffs, these mainly grains, while automotive products, farm and electrical machinery showed heaviest gains.

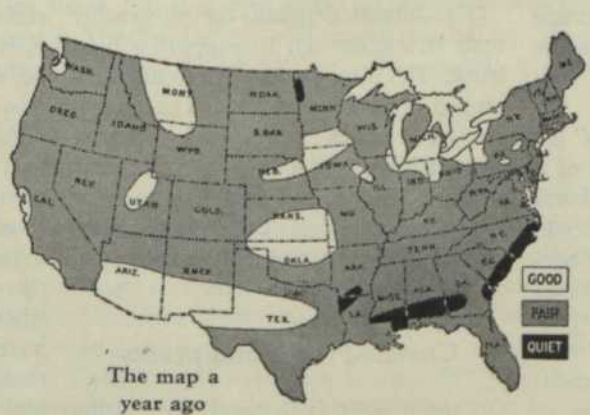
A measure of the immense activity in stocks during October is had in the bank-clearings totals for that month. Sales of stocks on the New York Stock Exchange for October were 141,668,410 shares, a gain of 22.7 per cent over those of the former record month, November of last year, and of 43 per cent over those of October 1928. Bank clearings for October at New York gained 54 per cent over those of a year ago. For ten months, stock sales were 968,763,900 shares, larger than for the entire calendar year 1928 and 36 per cent more than during the first ten months of 1928, while clearings at New York totaled $401,052,337 or a gain of 26.7 per cent over a year ago.

October saw a downward trend in failures and liabilities from recent months and from a year ago. The decrease in failures from October a year ago was 10.5 per cent, although increases were shown over the like month of the preceding years. Liabilities for October were the smallest in that month since October 1919 and the lightest for any month, except last September, since the autumn of 1925.

(Continued on page 76)

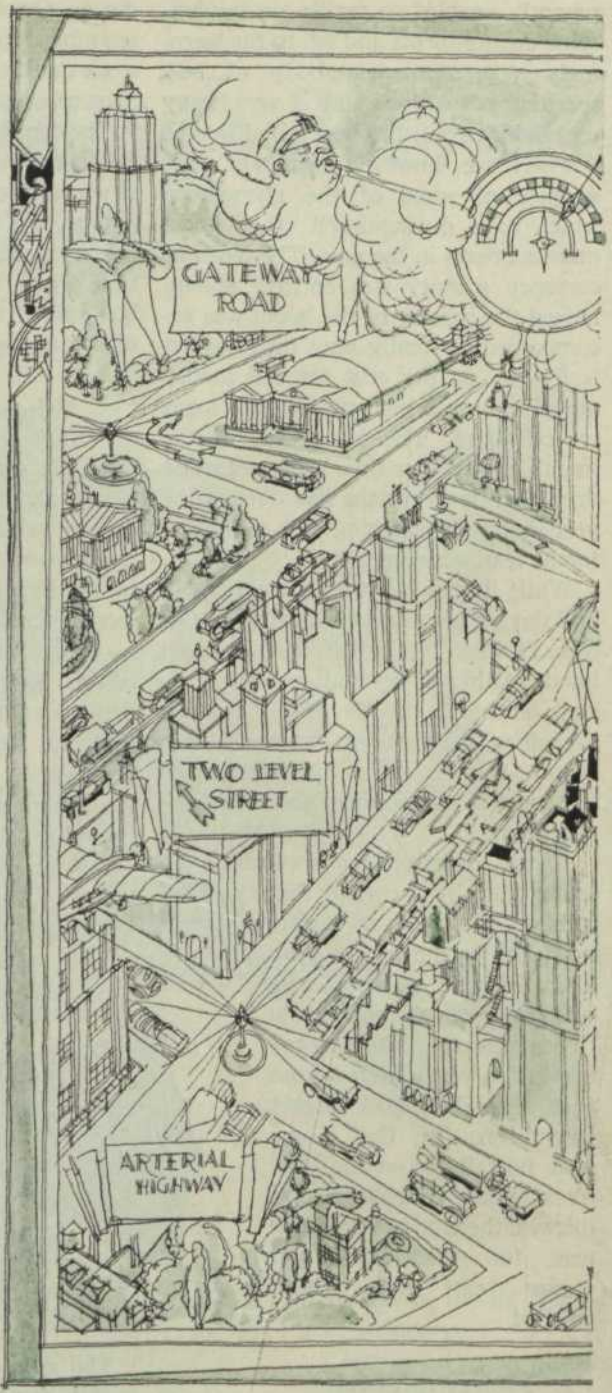


The map of last month



The map a year ago

Business in nearly every section has held its own or has registered gains over last year. There has been marked improvement in the East



THE motorist, breezing along at 50 miles an hour, grins and says, "This is a good road." It may be and again it may be a very bad one. Road builders have discovered that economics play an important part in highway construction. That discovery affects every motorist and every taxpayer

Making Roads Pay Profits

By CHARLES R. THOMAS

Editor, Highway Engineer and Contractor

DECORATIONS BY LYLE JUSTIS

THE increased use of motor vehicles brought a basic change in the highway industry starting about two decades ago. This change has been reflected in the attitude of the public. At the beginning the public had to be begged to provide funds for highway building. Now conditions are reversed.

In the past decade "Good Roads" became a popular slogan, the basis of a number of state political administrations. Vast undertakings were begun which, however, were somewhat inadequate as judged by today's standards. Now we are beginning a period in which the public, while still bulling the market for good roads, is becoming particular that the roads be built more in accordance with traffic requirements than to complete a great "system" of highways.

It is interesting to consider just how this change came about. The public conception of a "good road" differs vastly in various sections. It depends largely on the density of population.

The farmer demands an all-weather road strong enough to support a light truck. He also wants "his road" improved at a low tax rate. The metropolitan regions want wide, strong, smooth highways to relieve traffic congestion. The cities would like to have their through streets put in better condition and congested intersections relieved by grade separations.

Crowded roads and profits

ON top of all this demand, there is the plea of the summer tourist who wants to go vacationing when and where he pleases on a good uncrowded road—a kind of road, by the way, that can be highly unprofitable from a dollars and cents standpoint unless this tourist travel is but a small part of the total traffic, which, of course, gets one right back into the maddening crowd.

All this crowd, undoubtedly, is due to a failure to anticipate the growth of motor traffic and to build adequately to meet this traffic wherever it happened to be. In building "road systems" so that there would be a reasonably good road wherever one chose to go, we simply have not built for each section roads that were wide enough, strong enough and plentiful enough to meet the democratic demand that each man's road be where he wants it and the kind of road he wants. There are undoubtedly extenuating circumstances for not having met the public demand for "good roads."



★ **Two-level streets, a belt road around the congested districts, a gateway road leading to an arterial highway—by such means as these the motorist of the next decade will be able to speed from his city office to the open country. Traffic devices will guard his safety. There will be no grade crossings. A sixty-mile jaunt after business will be not only possible but easy and comfortable**

Railroads and modern highways have many points of similarity, but one most important difference—a motor vehicle has freedom of movement and will find the economic route that offers convenience, speed and economy. This accounts for much of the congestion of the better roads—the traffic is heavy because each driver finds the road more convenient, speedier or more economical.

But there is a point of similarity between highways and railroads. The railroad builder seeking tonnage to haul connects with steel rails various traffic sources; the highway builder similarly must locate his road where it taps maximum traffic sources and he must build the type of road demanded by all of the traffic tributary to the road. If funds are available, future traffic may be anticipated in the construction.

Freight and passenger—especially passenger—traffic on modern highways has grown astonishingly and the end is not yet. It is to be hoped that the error of underestimation of traffic growth will not be continued.

It is only within the last few years that road engineers and officials have begun to study traffic as a preliminary to highway construction. In the past traffic was regarded somewhat as a consequence of road construction. Little study was given to the traffic demands for certain types of pavement. Research studies by the United States Bureau of Public Roads and a number of state highway departments have developed some interesting facts.

The composition of traffic varies with the industries of the region and the volume varies almost directly with the

population—the more people the more traffic—a simple rule and reason for not making all roads alike as to width and type.



Take Vermont as one case. Observers were stationed at strategic points on the roads and all traffic was questioned and weighed. They estimated that in 1927 the motor use on the main state roads totaled 940,600 passenger-car miles. Of this 36 per cent was by foreign cars. Vermont is a small state with many cars from over the border.

Of this traffic, two-thirds was for recreation. Half the cars traveled less than 20 miles and approximately 20 per cent traveled more than 200 miles on the trip. Of the farm-owned cars, 94.3 per cent covered less than 30 miles and there were no 200-mile trips.

City-owned cars traveled four times as far on Vermont highways as farm cars and 90 per cent of the mileage was made by city-owned cars. Of the trucks, 81.1 per cent were city-owned. The average net cargo was 2,710 pounds for the city trucks and 1,270 for the farm trucks; 45 per cent traveled less than ten miles and 78 per cent less than 30 miles. The average daily motor-truck use of the state roads was but 62,400 vehicle-miles, a small fraction of the total passenger mileage.

Other states not so rural reveal a slightly different story. The point is that we have developed a method of determining what the traffic is and can now begin to build roads to meet that traffic and predict what, where and when traffic must be accommodated.

Each city or town is a traffic region about which traffic revolves. A group of these traffic regions connected with a highway make a through route.

Need for secondary roads

FEEDING into the through routes, which account for some 75 per cent of the vehicle mileage, are innumerable secondary roads serving farms and crossroads stores. These roads have been somewhat neglected, and the development of an all-weather surface for them that will not cost more than the earning capacity of the roads warrants is one of the pressing highway tasks ahead.

The use of oils and emulsions on a base made of local road material is recommended in a recent report of the National Highway Research Board. Even with this comparatively inexpensive material many of the secondary roads will have a hard time to show a profit.

It should be an easily understood principle that no highway should cost more than it can earn. The problem is to find the earning capacity when other things than dollars are given a valuation. Of course, there is a definite return from a highway investment just as there is from an investment in railroads. But since the public owns the highways, profits must be estimated as savings to the public in transportation costs.

In estimating these savings W. H. Connell, consulting highway engineer, says that $1,600,000,000 is saved annually in the United States as the result of the construction of 150,000 miles of hard-surfaced roads and 340,000 miles of gravel roads, a total of 490,000 miles of surfaced roads. This saving is based on facts established by research work at Iowa State University which showed that the operating cost of motor vehicles is 25 per cent higher on dirt roads than on hard-surfaced roads, and ten per cent higher on dirt than on gravel.

The highway problem in cities is complicated by the restrictions of street widths established in the "horse age" which makes cost of widening enormous. Certain arterial streets seem to carry the bulk of the traffic and widening and double-decking plans are being considered in both large and small cities. The programs must be financed in some way and just how to do it without excessive taxation is troubling many city councils.



The two-level street is not a dream—it will arrive within the next decade

Looking into the future

THESE problems can and will be solved, however. Their solutions will result, if we may indulge in prophecy, in some rather startling physical developments of our highways. Suppose we step ten years ahead and ride out of any large city for a breath of fresh air, noting *en route* the developments that have taken place.

Leaving our office at five o'clock, we catch a bus to the multiple-story parking garage on an arterial highway where an attendant delivers our new and silent car in a few minutes. We follow the arterial highway, with its lanes of traffic controlled by automatic signals separating fast and slow traffic rather than take the two-level street. Where this highway intersects the belt road, which swings in a wide circle around the heart of the city, we pass around the rotary intersection to get on the belt road and join the swiftly-moving traffic stream until we come to the gateway road we wish to take to the country. On this road we are not troubled by stops at intersecting streets, for all intersection points have grade separations.

Again passing around a rotary intersection we are on the country gateway road. A fairly good road but a little difficult to average the usual 50 miles, we say. As we pass the roadside market, housed in an attractive pavilion, we note a passenger plane rising from the field adjacent to the highway.

"Easy to get to that field," we remark, "close in."

Turning into the fast traffic lane we overtake a bus in which supper is just being served. A few hours later the passengers will be going to bed in roomy berths.

The four traffic lanes of the road provide for fast and slow traffic in each direction and if we want to turn off the road to our golf club we sometimes complain that we have to go out of our way because the turnout point is not very handy to our club road. But the roadsides are well cared for and we remark on the beauty of the spring foliage.

Trees are not in rows like telegraph

(Continued on page 182)



COURTESY ASSOCIATED PRESS

Spectators crowded the Sub-Treasury steps to watch the excitement as stock prices went tumbling

When Stock Buyers Go On Strike

By MERRYLE STANLEY RUKEYSER

★ **THE DAY after prices on the Stock Exchange collapsed so suddenly and completely, the staff of NATION'S BUSINESS was besieged with questions from outsiders and from each other. Who or what caused the collapse? Why did the bankers' consortium come to the rescue and how? What is the significance of this panic—if it was a panic—and what results may be expected? Some of these we had difficulty answering to our own or others' satisfaction so we turned them over to Merryle Stanley Rukeyser. This article is his reply**

THE utter collapse of prices on the Stock Exchange on Black Thursday, October 24, and the following Tuesday, October 29, was ascribable to the temporary repeal of the law of averages.

Banks, life insurance companies and exchanges are conducted in the belief that human beings on the average will act normally in accordance with past experience. The Stock Exchange is a weather-vane reflecting sentiment but having no opinion of its own. Its operations normally rest on past experience which teaches that there will always be some who wish to sell what others want to buy.

The price level at the Stock Exchange is a barometer measuring the ebb and flow of optimism concerning American

business prospects. When optimists are more eager to buy than pessimists are to sell, security prices rise. Conversely, when pessimists are more eager to sell than optimists are to buy, the price level recedes. In normal times, the price level perpetually vacillates reflecting quick shifts in the winds of opinion.

Unless buyers and sellers were animated by a vast diversity of objectives, the market could not operate smoothly. If, in times of prosperity, everybody wanted to buy and, if at the approach of a recession, everyone desired to sell, orderly markets would be impossible.

What caused the collapse

ON THOSE two October days the market suffered temporarily from the lack of cleavage of opinion concerning stocks. From a mechanical standpoint, it is immaterial whether bids (orders to buy) and offers (orders to sell) flow from logical reasoning, hunches, emotions, or necessary liquidation. They affect prices equally whether they come from analysts or suckers. On Black Thursday before the afternoon rally, speculators and investors temporarily were all sellers, with no articulate buyers to take what they were clamoring to sell.

The explanation of the collapse is as simple as that.

The New York Stock Exchange, in its legal form, is a private club, which provides a meeting place where brokers may buy and sell stocks and bonds for themselves and for their clients. The Exchange is interested only in assuring that transactions are made in accordance with "just and equitable principles of trade." It is a non-profit-making institution, supported by initiation fees, members' dues, and listing fees.

The Exchange permits dealing only in 1279 selected stocks which have met its austere listing requirements. These stocks have to do with the genuineness of representations made by companies, rather than valuations.

For convenience trading in a listed stock is confined to one of 18 trading posts. At each post cluster "specialists." They are members who confine their operations mainly to four or five stocks.

The specialist keeps a separate book for each stock in which he specializes, and in this book he lists all the bids that have been made for the stock, and all the offers to sell. If the bids and offers do not match, the next sale usually is made between the highest bid and the lowest offer.

Bids far below the last sale can be entered in the specialist's book, where they may remain for months until some one is willing to sell stock at that price. Likewise, optimistic sellers can list offers far above the prevailing market price, hoping that in time someone will be willing to bid that much. However, in practice there are natural price areas above and below the current price beyond which the public imagination, as reflected in orders, does not go. On Black Thursday, prices broke below those natural limits.

On normal days, there are numerous bids and offers at each rung of the price ladder above and below recently prevailing prices. The more active the stock the more numerous are the bids and the offers. These bids and offers, which have been placed with the specialist in advance, are supplemented on active trading days by a continuous current flow of current bids and offers which come over direct telegraph wires and cables throughout the country and the world.

Time is the essence of brokerage machinery.

An order and the report of its consummation have accomplished a round trip across the continent within 60 seconds. Such requests to buy and sell shares at fixed prices are reinforced by a huge volume of orders to buy and sell "at the market." A market order means that the buyer stands willing to accept the lowest "offer" whatever it may be, and that a seller is willing to accept the highest available bid, whatever it may be.

The law of averages tends to balance bids and offers, though of course not precisely. In normal times, the disparity between the buying urge and the selling urge is offset by activities of professional operators. These operators are of two general classes. First, in and out speculators, who want to buy and resell on the same day. And, second, investment houses, pools, and syndicates interested in sponsoring the market behavior of a particular stock.

Buyers not always at hand

ESPECIALLY in the less active stocks, there is not always an investor at hand to buy when another investor wishes to sell. If no satisfactory bid for the stock is available, the specialist in normal times will take the stock himself slightly below the natural price. The specialist in this rôle serves the economic function of making the market continuous, instead of intermittent.

He expects to be rewarded as soon as a real investor comes along, to whom he can sell the stock just bought at its natural price. Of course, if the specialist, who assumes the risk of ownership, misjudges the situation, he is likely to sustain a loss. Besides the specialist, there are free lance floor traders among the other members who also try to scalp fractional profits by trading in and out of the same stock on the same day, supplying a demand when the outside demand has momentarily ebbed. The federal and state stock transfer taxes have reduced the profit in scalping and thus cut down the number of floor traders, who were more effective in keeping the market orderly in previous panics.

Moreover, non-member professional traders, who develop round shoulders over the ticker each trading day, also attempt to amass a profit by dexterously going in and out of the market, supplying bids and offers when more permanent holders are temporarily inarticulate.

The second type of supplementary aid given to market activity comes from the interested bankers and syndicates. In sponsoring a stock, they will supply bids and offers above and below the market. Such operations constitute manipulation, which is an unpopular word. When manipulation is intended to make stocks rise far above their worth for the purpose of unloading them on gullible amateurs, it is a dangerous, unworthy, and antisocial form of financial activity.

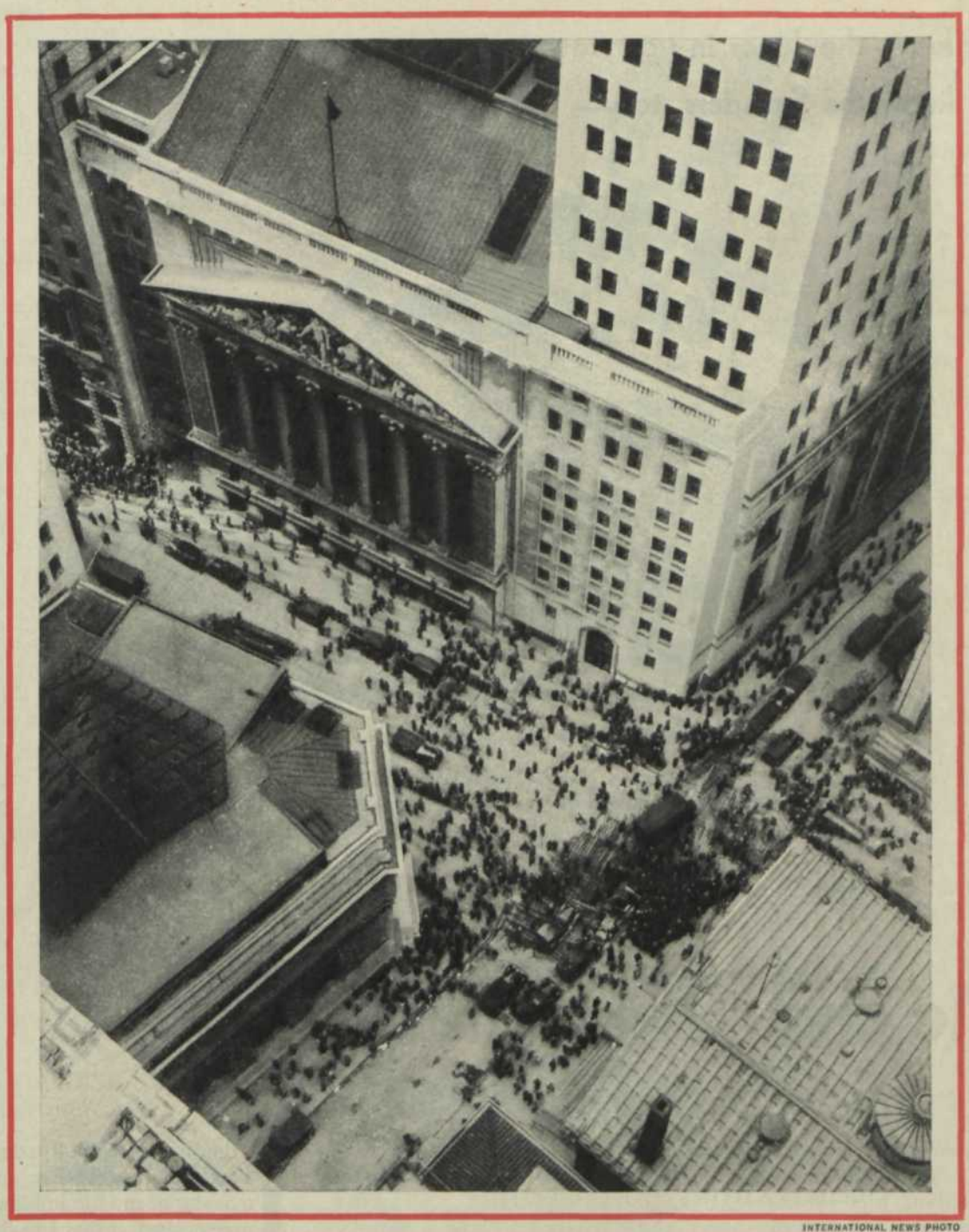
On the other hand, some manipulation is merely for the purpose of assuring orderly markets.

A torrential flow of stocks

BY 11 O'CLOCK Thursday, October 24, it was apparent that the usual machinery of the Stock Exchange had broken down. There was a torrential flow of stocks to the market place. It was super-induced by mob psychology and by defects in the marginal system, under which one layer of marginal accounts after another became impaired by the very decline of the market itself.

The psychology of the moment, which possessed the collective mind, paralyzed the normal buying demand. For a time it seemed that everyone had turned seller. Accordingly, the usual quota of bids for stock on the books of specialists was soon filled by the frantic offers to sell at the market. Furthermore, as the hysteria spread, many who had bids outstanding cancelled them. Accordingly orders to sell at the market were matched against the lowest bid on the specialists' books.

Sponsoring groups carried their schedule of bids and offers down to a level below the previous day's close beyond which they estimated that the stock



INTERNATIONAL NEWS PHOTO

Brokers were not the only ones who had a hectic day on Black Thursday. Traffic cops had their hands full as crowds rushed to the Stock Exchange

would not break. But stock prices rapidly fell far below these computed boundary lines. When they did, so-called "air pockets" were uncovered—price areas where there were no bids whatsoever.

Such a situation occurred in Standard Brands, and for a time the specialist informally placed his book under his arm, and walked away from the post. Similar situations occurred in United Gas Improvement, American Telephone and Telegraph, Columbia Carbon, and elsewhere throughout the list.

In the emergency, specialists, floor traders, and outside scalpers were, except in a few instances, afraid to fulfill their usual rôle of intermediate holders of securities. They were not only saturated with the psychology around them, but they recognized their inability to stand up and buy stocks from millions of excited investors. Outside speculators, too, were discouraged by lack of current information as to what was taking place.

On Black Thursday, the tape was as much as 248 minutes late, and on Tuesday as much as 152 minutes late. The breakdown of the machinery, (which has a capacity of about five million shares a day under present conditions) added to the fear waves.

In describing the breakdown of the law of averages, Professor Irving Fisher, of Yale, the bull economist, pointed out:

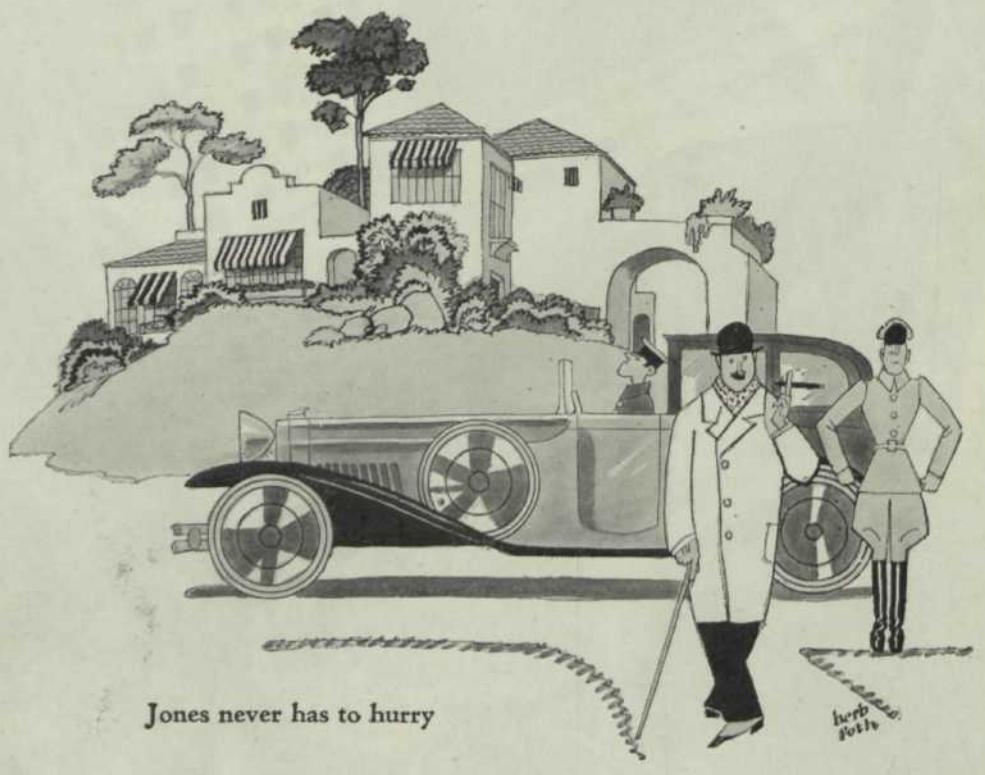
"During the recession from the September high my index of 225 industrial common stocks moved from 209½ to 139. Yet this drop of more than one-third in the price level of stocks was accompanied by no disturbance of the nation's high-record prosperity.

"I would compare it rather to a run on a bank.

"It should not be taken as commentary on a bank's management, necessarily, that there should be a run on it. It often means merely that people have got

(Continued on page 173)

● **You know the Jones in your town.**
You know the Saunders, too—



Jones never has to hurry

Me and That Jones Fellow

By W. O. SAUNDERS

Publisher, The Elizabeth City, N. C., Independent

ILLUSTRATIONS BY HERB ROTH

ONE is a complacent, satisfied man who is doing well and is content with things as they are; the other, restless, dissatisfied, sure things that are wrong can be bettered.

Who shall say which gives more in the long run to his community? Any good chamber of commerce secretary, any manager of a trade association, will pick you half a dozen Saunders or half a dozen Joneses in his town or his industry. He knows the Jones type which says, "Here's the money. Go ahead but leave me alone." He knows the Saunders type which says, "This is wrong, we must fix it."

Saunders and Jones. It takes men of the type of both to make a business, a town or a world

IF the Joneses didn't live on my street I probably would live out the remainder of my life in blissful ignorance of the fact that I haven't gotten ahead in life financially as well as I should. But the Joneses live on my street and Mrs. Jones' eight cylinder sedan, her diamonds, her clothes, her parties and her vacation tours worry my wife.

Jones is a steady, unimpressive chap who would go unnoticed in a crowd. I admit that I have better than average intelligence and I have worked hard all my life. But Jones has a thermostatically controlled oil-burning heating system in his hardwood floored and weather-stripped home, and I have never been able to install anything better than a parlor furnace that has to be reinforced with gas heaters and open fireplaces all over the house.

Jones goes leisurely to business be-

tween eight and nine every morning, closes at six and never rushes between times. I do some work almost every week night and usually come down to the office on Sundays to look over the mail and answer neglected correspondence.

Industrious, but—

AND I have been working that way all my life. The wife has never questioned my ability and my industry. No one else ever did. I worked hard as a boy. When I was 12 years old I worked in my father's country store, getting out of bed by daylight every morning to open up and put the place in order. With the chores at the store and at home, I still found time for odd jobs and carried a newspaper route.

I left home at 17 and went on my own. I had to work hard in those early years to get a toe-hold and I have been working like a slave ever since to maintain it. For a good many years I have lived quite comfortably, but I have never been able to get out of debt and I never have anything ahead except my insurance policies and things I have bought on the instalment plan.

Last year I laid off a valuable assistant in my business and undertook to do both his work and mine. I succeeded, but at the end of the year my bank account hadn't grown a bit. But



My children have been ostracized at times

Jones continues to get ahead and my wife continues to ask me how does Jones do it? My answers are rather feeble.

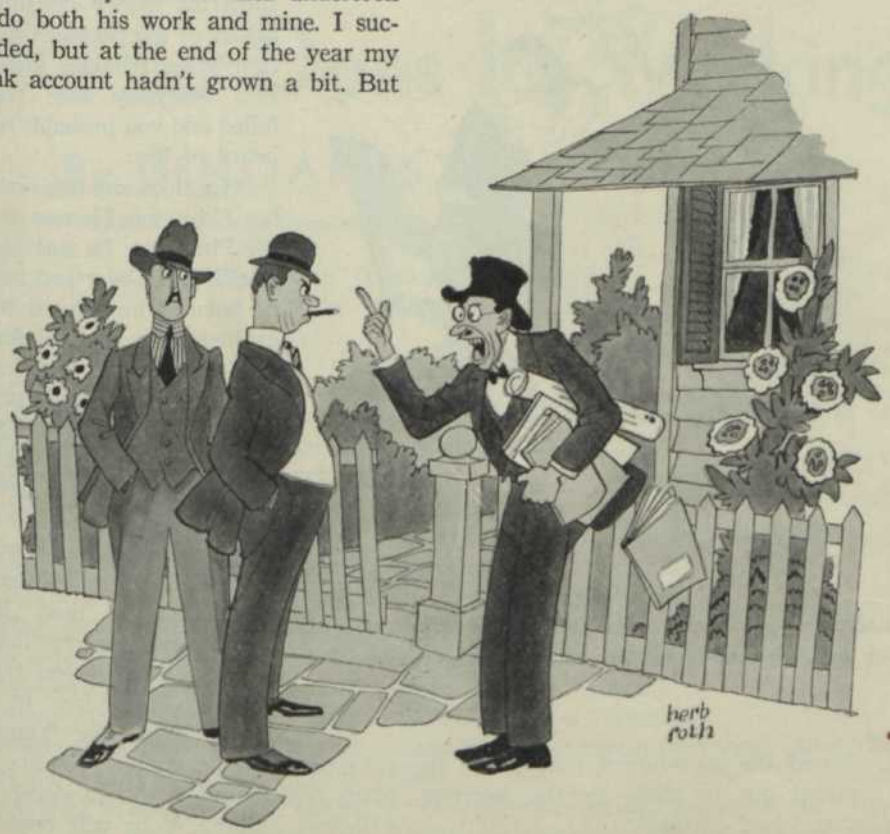
Jones is the proprietor of an unpretentious business. He never makes a noise, never advertises, just plugs along in a quiet way, steers clear of all civic and community activities, never mixes in politics, has few friends. But his wife and kids put on lots of dog and he pays the bills. He has an enviable bank deposit and much income producing property scattered around the town.

Jones and myself started life about the same time with the odds about evenly against us in most things, but all in my favor intellectually. I could express myself; Jones couldn't. I could hold my own in almost any company; Jones loitered dumbly on the outskirts of the crowd.

I was quick; Jones was sluggish; I was bright; Jones was dull; I was affable; Jones was indifferent; I was intense and enthusiastic; Jones was wary and cautious; I was hot; Jones was cold. But Jones has outstripped me in the business of getting along.

Still, I never paid much attention to Jones until I was past 40. Jones bought a place on the river where I had also dreamed would be a nice place to plant a home. But I haven't yet had the means or the leisure to enjoy it. But Jones actually takes whole days off to go fishing while I often find myself at my desk late at night because the days are not long enough for me to do my work.

Then I began to ask myself about Jones. This Jones has got one important thing that I lack—patience. Jones and I both knew that some day a highway would be built through a certain locality and that lands along that road project, which could be bought for taxes then, would be highly valuable. Jones quietly bought acreage. The timber growth on his property paid his taxes and yielded him an income besides. In time the road was built and his holdings quadrupled in value.



I say what I think on almost any occasion and a rival business could prosper on the customers I have lost

I lack patience

NOW I just wasn't built that way. In Jacksonville, Fla., in 1907, I was attracted by one of the most beautiful tracts of long leaf pine I had ever seen. It was close to the ocean, on the main line of an important railroad. There were many thousands of acres in the tract and it was on the market at $3.00 an acre. I couldn't have bought more than 300 acres, but the agent obligingly offered me a jib of the property at the acreage price.

I got to thinking about the taxes I would have to pay and all the

years that would intervene before I could build a lodge on the property and I passed it up. In the Florida boom of 1926 that land sold for better than $1,000 an acre.

Jones started building a home the first year he was married. He did it on borrowed money with every prospect of being years and years in paying out. I didn't have the patience to assume any such tedious obligation. I was 35 and my family established before I went into the Building & Loan and started a home of my own.

Another thing that Jones has that I lack is a facility for keeping his mouth shut. Jones is content to be absolutely opinionless. No one resents him, no one fears him. He never antagonizes, never alarms. But I say what I think on almost any occasion and have made enough enemies among my neighbors to keep a rival business prospering on the patronage of customers I have lost.

I have been forced to do without many things all my life because quite early in life I ran away with the notion that this is a free country in which every man is guaranteed religious and intellectual liberty. It is not true; the most unprofitable thing in America or any other place is free thought and free speech. It has cost me dearly in lost business and lost opportunities for financial gain. It has cost me far more in the mental and spiritual torture I have endured in refusing to go with the crowd.

Freedom of press?

MY wife has had to go without beautiful clothes, wear stockings that had been darned until they blistered her feet and my children have been socially ostracised at times because I persist in saying what I think.

Printing what I think in my own little newspaper has kept it a little newspaper. Saying what I think has cost me thousands of subscribers and thousands yearly in profitable advertising.

I have foregone a revenue of several thousand dollars a year from patent medicine advertising alone, because I believe patent medicines are damnable and say so. Jones may entertain the same opinion of patent nostrums that I do, but he would hold his tongue, accept the business, pocket the money and prosper. I say what I think.

It has cost me several thousand dollars a year in loss of subscriptions and advertising just to say what I thought about two men in our town. Those two men ruled the town. They were financially interested in most of the important stores, business houses and banks. They effectively intimidated almost every business man in town who wasn't financially obligated to them.

I questioned the right of any man or pair of men to rule the town I had come to live in. I said what I thought about them. I thought one of the pair was a crook and I said so. I had 40 libel suits on my hands in as many weeks.

Merchant after merchant dropped his advertising. Even those who believed I was rendering the community a service couldn't afford to identify themselves with my paper because they feared the punishment that would be meted out to them by the interests that I had offended.



I usually come down to the office on Sundays to look over the mail and answer correspondence

Now Jones would not have disturbed that influential pair. He would have inventoried their value and the value of their family connections and friends to his business, cultivated them quietly and cashed in on them.

You must think conventionally

BUT I am just not built that way. A shrewd citizen came to me early in my career as a newspaper publisher and here is what he said. I made notes at the time and do not have to refresh my memory. Here it is:

"God has given you a great talent; you know how to express yourself in language that people can understand; you have the gift and the power to mold public opinion; you can be the greatest power in this community and become a power in the state; money, friends, influence, power and prestige are yours to command.

"W. O., you are actually impoverishing your good wife and those innocent children by foolishly persisting in saying what you think. The world doesn't care a hoot what you *think*, but people are terribly resentful of the individual who *says* what he thinks—if he doesn't think just as they think.

"You can't reform the world in a day or in *your* day; the world doesn't want to be reformed. Asoka tried it hundreds of years before Christ. Asoka disbanded his armies, spent his money lavishly in behalf of the people, tried to translate a religious idealism into everyday life; Asoka failed and you probably never heard of him.

"Nor does any one remember Akhnaton. He was one of the Pharoahs; he was highly intelligent, honest and devoid of hokum; he refused to be exalted as a god, abolished the shrines and temples of a vicious, predatory, priesthood, tried to reform Egypt. You never heard of him.

"Socrates tried to reform his world in ancient Greece; they gave him the hemlock and he died; magnificently, maybe, but he died. Jesus tried it and was crucified in three years. Are you trying to usurp his place in the scheme of things? You are not a second Jesus, my boy; you are just plain Will Saunders with a dependent wife and children. Your wife ought to live in a better house than the cottage you have tied her down in.

"You know who Tom Paine was. Tom

(Continued on page 144)



Boundaries crumble as radio makes the nationalism of all countries known throughout the world

Radio Dons Its Working Clothes

By GEN. JAMES G. HARBORD

President, the Radio Corporation of America

DECORATIONS BY GEORGE ILLIAN

FLINGING its messages across oceans and continents at a 200-word-a-minute speed, radio stands ready to serve as a tool in your business. Before accepting it, however, you want to know if it is a dependable tool—and you also want to know something of the way it works

ALMOST from the discovery of electricity, man dreamed of bending it to his service. Yet a steady, reliable source of current was not found until, early in the nineteenth century, the battery was invented.

Faraday discovered that a current could be generated in a wire by sweeping it through a magnetic field. Steinheil of Germany suggested the flashing of intelligence over a single wire, with the earth as the return circuit, as early as 1838. In 1841 Wheatstone and Cooke set up the first working telegraph in England. The public paid it no attention.

Fortunately—for the telegraph—a murder was committed in a London suburb, the terminus of the first 13 mile telegraph line. The murderer escaped by train to London. But a message flowed across the line, and, as he stepped off the train at London, he was apprehended. Instantly the public realized that a practical communication system had been devised.

The American artist, Samuel F. B. Morse, returning on the packet ship "Sully" after a discouraging attempt to sell his paintings abroad, whiled away his time by designing an electrical device based on theories he had learned through a youthful interest in electricity. When the slow voyage was over, he had worked out a complete telegraph that printed dots and dashes on a moving paper tape.

Time passed. In 1883 a crude model

IT TOOK a murder to prove the telegraph practical; a dead man's ear played an important part in telephone development; radio went unrecognized until it saved 1,500 lives in a shipwreck; broadcasting, now so vital to it, was once radio's greatest handicap. Romance and science worked hand in hand to establish our communications system



of the telegraph was made and not long after, Morse, sitting in a room in the Capitol at Washington, ticked out the famous message, "What God hath wrought!" over the telegraph to the receiver in Baltimore.

Experiments in the Hudson River and the English Channel proved that an undersea cable could be laid and utilized. An attempt was made to connect continents by wire. It was a disheartening job.

Fishermen caught up the cable; vessels grappled it with their anchors; storms struck the cable-laying ships and broke the cable. Yet, in 1858, more than 700 messages had been successfully sent over the Atlantic cable.

In the meantime, Alexander Graham Bell was endeavoring to apply his knowledge of acoustics to electricity, with the idea of sending the actual sound of the human voice over a wire. By experimenting with the ear of a dead man fastened to the receiving end of his wires, he came upon the idea of a membrane receiver—a disk that quivers under the influence of the nearby electromagnets through which flows the signal current coming over the line, thereby changing electrical variations into sound waves.

At the Centennial Exposition in Philadelphia in 1876 Professor Bell's telephone attracted little attention. It needed an unusual, cyclonic happening to bring it forcibly to the attention of the judges.

This unusual something arrived in the person of the colorful Emperor of Brazil who, passing by with his glittering retinue, saw Professor Bell, his old instructor.

Bell showed the Emperor his telephone and talked to him from the other end. The Emperor listened and then ejaculated: "My God, it talks!"

That was enough. The telephone became the sensation of the Centennial.

And then came radio

SO CONTINENTS were connected by cables. Across thousands of miles of wire, the human voice could be heard. Yet those who went to sea were still beyond reach of telephone or cable. Of them the world knew nothing from the time they left port until the end of their journey. Vessels in distress were utterly helpless.

Even the submarine cable was not altogether dependable. It could easily be destroyed by an Act of God or the designs of war. Nations without coasts depended upon neighboring states for their transoceanic communication.

Something else was needed—something that would ride high above storms, wars, political jealousies, and frontiers.

Meanwhile, let us turn to the laboratory. In 1865 the British mathematician, Clerk Maxwell, had predicted the existence of electro-magnetic waves. In 1887 Professor Heinrich Hertz, a German scientist, demonstrated that electro-magnetic waves were of the same nature as heat and light waves. They could be propagated through space, reflected, deflected, absorbed, and detected. These conclusions made a profound impression upon Guglielmo Marconi, an eighteen year old student at the University of Bologna.

This youth argued that if electrical energy could be transmitted without wires, why could not these electro-magnetic waves be utilized for *wireless* communication? He proved that they could.

First it was a few hundred feet, then a few miles, then a few hundred miles, in bewildering progression. The English Channel was spanned early in Marconi's career. Communication was established between ships and land. In 1901 the Atlantic Ocean was spanned, between Cornwall in England and Newfoundland in America.

For years, wireless telegraphy could not afford to compete with the cable systems and telegraph lines on land. On shipboard, however, it enjoyed a monopoly. Yet again, something startling had to occur before the public became wireless conscious.

That event occurred when the steamships "Republic" and "Florida" collided off Nantucket. Through the night air came the first distress call from a ship at sea—the "C.Q.D." of operator Jack Binns. It was received. More than 1,500 lives were saved. Radio had become a vital factor in safety of life at sea. But radio remained "wireless telegraphy" until another cataclysm gave it incentive to push forward.

Before the World War, Great Britain led in the development of submarine cables. Her economic prosperity depended upon her international trade. That, in turn, necessitated a vast and efficient system of international communications, especially transoceanic. She was particularly fortunate in her plans because she had a monopoly on gutta-percha, the only known material for insulating submarine cable. So, in 1914, practically all the world's cable lines converged at London.

Other European nations, hampered in their overseas communications, particularly with far-flung colonies, had turned to radio as a possible and economical solution. France and Germany had ambitious plans for world-wide networks. Great Britain, not content with her cable monopoly, conceived of an "All-Red Chain" of world-wide radio networks. All these projects, however, were purely theoretical and fanciful, being planned on a scale fantastic in proportions and far in advance of existing possibilities.

An economical generator

WITH the outbreak of the war in 1914, Great Britain and the European countries had to abandon their plans. To the United States, however, thrown upon its own resources for the first time, a new impetus was given to research and engineering. The American research laboratory soon became a recognized institution in all industries.

In this period, Dr. E. F. W. Alexan-

derson of the General Electric Research Laboratory developed the high-frequency alternator. The necessity for a source of high-frequency current as the foundation for economical and positive long-distance radio communication had long been recognized.

During the closing months of the war, the Alexanderson alternator was used in spanning the Atlantic. It played a very prominent part in carrying President Wilson's Fourteen Points to the German people.

It flashed instructions to our A.E.F. in France. During the Versailles Conference, it served as an important link between our peace delegation and the home Government.

Britain sought the alternator

WHEN the war ended, Great Britain picked up the threads of her "All-Red Chain." Having witnessed the remarkable performance of the Alexanderson in spanning the Atlantic, the British Marconi interests offered to place some five million dollars' worth of contracts with the General Electric Company in return for exclusive rights to the new electric alternator.

The British Marconi Company was the only logical customer. The General Electric, a manufacturing organization, was justified in seeking an outlet for this invention. It was prepared to accept the British offer.



Samuel F. B. Morse

But President Wilson, then in Paris, foresaw that if Great Britain gained control of the Alexanderson alternator, she would dominate the radio field just as she had monopolized the submarine cables.

In this emergency President Wilson sent Admiral W. H. G. Bullard and Com. S. C. Hooper, U.S.N., to General Electric in New York, with the urgent request that the British offer be declined, purely on patriotic grounds. The General Electric complied with that request but, in doing so found itself without an outlet for an invention in which it had made a great investment.

Under Admiral Bullard's able guidance, a plan was evolved. The American Telephone & Telegraph Company, the Western Electric Company, the General Electric Company, the Westinghouse Electric & Manufacturing Company, and the United Fruit Company united to form a communicational organization known as the Radio Corporation of America, in 1919.

The property and rights of the British-controlled Marconi Company of America, were taken over. Contracts were made with overseas radio organizations for the establishment of radio communications. The necessary financial resources and personnel were mobilized, and the United States launched upon a world-wide communication system.

Today, New York City and San Francisco are focal points of elaborate systems of world-wide radio circuits ex-

(Continued on page 128)



Of those who went to sea, the world knew nothing until the end of their journey

Evolving Issues in Congress

By FRED DEWITT SHELTON

FOR the first time in six years farm relief is not a major congressional legislative issue. Congress must feel lost without it—or possibly much more relieved than the farmers are. Creation of the Federal Farm Board has shifted the main issue to that body although it remains a collateral issue in Congress, tied up with tariff, taxation, railway rates and the like. Other auxiliary agricultural measures will be put forward and some adopted. President Hoover in his message to Congress in December probably will call attention to some added ways in which Congress can give practical help to the farmers.

Representative Summers, of Washington, has served notice that he will try to get a vote in the House on the Borah Bill passed by the Senate, which would provide federal licenses for commission merchants dealing in perishable agricultural commodities. The Secretary of Agriculture has approved the bill.

Endorsement of the idea of an agricultural foreign service by the Federal Farm Board probably will result in adoption of that plan, which has simmered in Congress for years.

The Tariff Battle

THE tariff bill continues to be buffeted about. One day it looks as if it will be speeded to a vote and the next day it seems destined to die by the wayside of Senatorial indifference.

Senate leaders late in October got panicky over the outlook for the tariff bill. Obstructive tactics of Republican irregulars threatened to prevent a final vote on the tariff bill before the end of the extra session. Democratic opponents contributed to the time-killing debates.

Nevertheless, a majority of Democratic and Progressive Senators are just as anxious for a tariff bill as are regular Republican proponents. Some of these Democrats want the tariff bill passed because they believe it can be made an election issue next year to the detriment of the Republican party. Others sincerely wish the bill to pass because they have a vital interest in certain tariff rates.

Some threatening tariff clouds have rolled away. Obstructionists in the Senate suddenly realized that they were about to be so triumphant that there would really be no tariff act. Then they would have been in the position of having defeated tariff revision, with its possibilities for farm relief—one of the major purposes for which the extra session was called.

I still believe that a bill will be worked out in conference that will be relatively more advantageous to agriculture and that it will become law without the debenture plan and with something like the original flexible clause restored.

Tax Revision Possibilities

TAX reduction got another boost when Representative Garner, of Texas, came out for a cut of $300,000,000. Mr. Garner is ranking Democratic member of the Ways and Means Committee and will have much to say in the matter of tax legislation. The chairman of the Committee takes a similar view of the situation and is hopeful of getting a substantial reduction through Congress. The Treasury Department is still studying the problem and is trying to determine the possibilities of tax reduction.

My long-range guess would be corporation income tax reductions to at least 11 per cent (now 12 per cent); added exemptions for dependents; removal of produce exchange tax; no change in estate tax.

Regulation of Air Transport

PROPONENTS of federal regulation of air transportation are becoming more insistent and an interesting controversy has arisen. There arose the question in the Senate as to whether such bills should be handled by the Committee on Commerce or by the Committee on Interstate Commerce. Senator Jones and members of his Committee on Commerce who pioneered in extending government aid to the infant aeronautics industry, contend that the Department of Commerce is the proper agency for further regulation. There is strong sentiment on the other side, however, for regulation of air transportation by the Interstate Commerce Commission. Those holding this view want the pending proposals for federal regulation to be considered by the Senate Committee on Interstate Commerce. Senator Couzens, of Michigan, is chairman of that Committee.

Federal Highway Aid

REPRESENTATIVE Dowell, Chairman of the House Committee on Roads, is advocating annual appropriations of $145,000,000 for federal highway aid to the states. The present annual appropriation is $75,000,000. Sentiment in Congress makes the increase likely to be granted. Automobile interests and Agricultural interests are strongly for this proposal.

Federal Courts

IT appears certain that this Congress will witness revival of proposals for curbing the powers of federal courts. It is expected that Senator Norris again will bring forward his bill for taking from federal courts their present jurisdiction in cases involving citizens of different states.

Continued pressure from labor organizations probably will cause the Shipstead anti-injunction bill—in modified form—to be considered.

Investigations

CONGRESSIONAL inquiry into further branch-making legislation will start in this Congress but there is little chance for new legislation yet. The stock-market and general-credit situation will receive much attention in Congress and probably cause an investigation into the whole Federal Reserve System.

The Senate inquiry into communications companies probably will not start until the tariff bill is out of the way. It promises to be thorough.

The President probably will ask Congress to clear up certain important phases of the Mississippi flood-control program which have invoked urgent protests from interests in the flood area.



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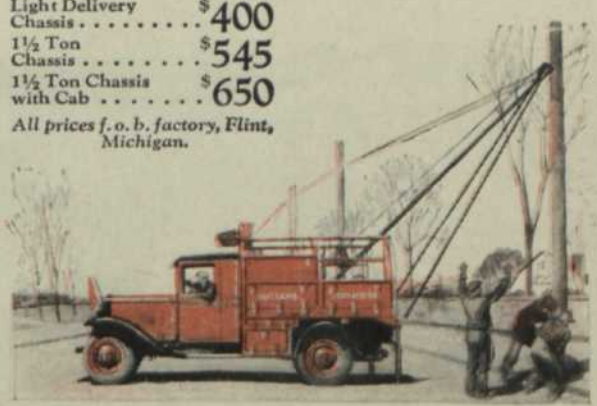
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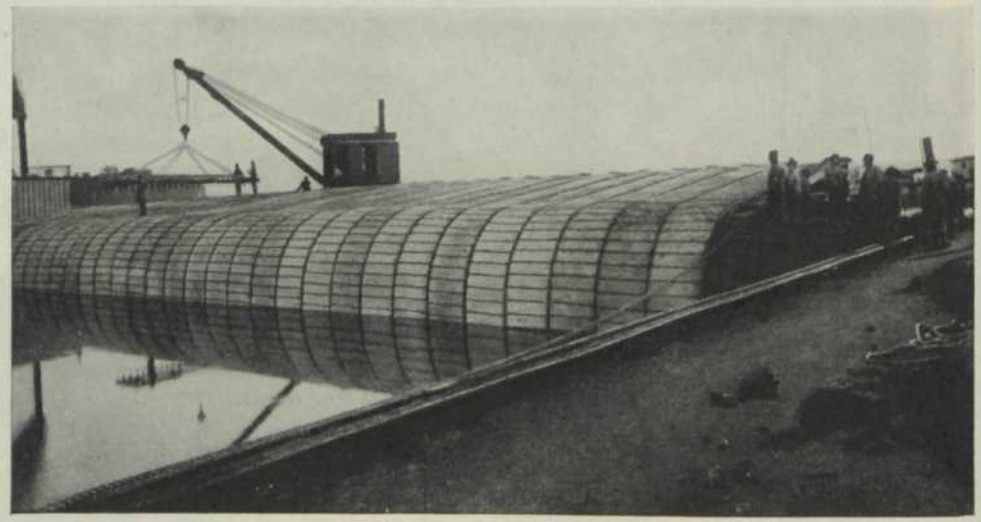
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A SIX IN THE PRICE RANGE OF THE FOUR

Heading Off the Future's Floods

By LIEUT. GEN. EDGAR JADWIN

Former Chief of Engineers, U.S.A.



COURTESY CORPS OF ENGINEERS, U. S. A.

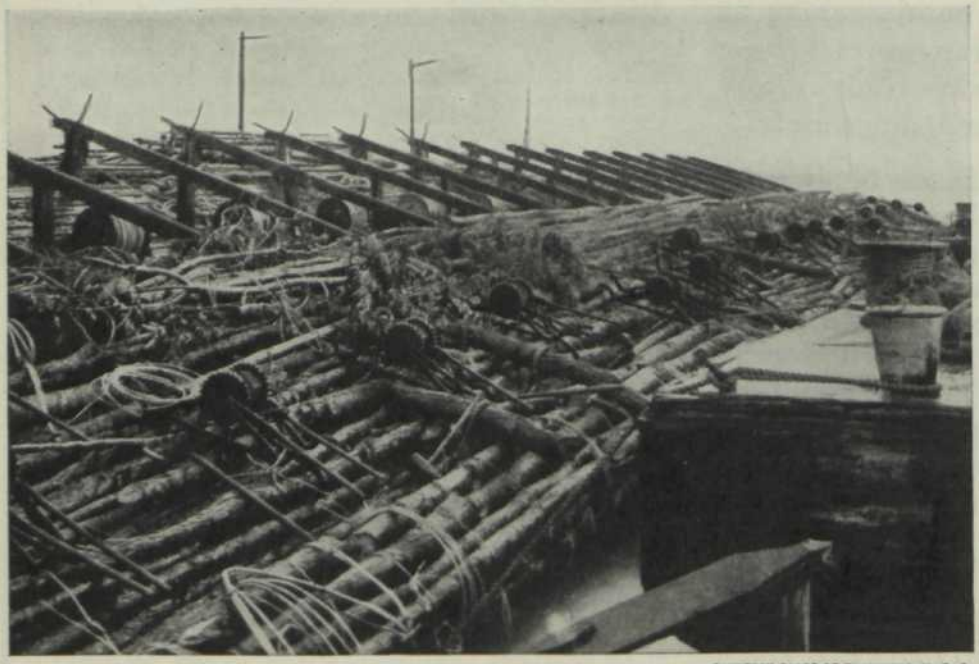
Concrete revetment mats are laid from specially designed barges

AFTER the 1927 flood, Congress authorized a $325,000,000, ten-year, flood-control program. Here's a report of the progress already made by the Army Engineers in charge of the work, written by their former chief just before his recent retirement from the service

IN THE spring of 1929 the largest flood which has ever occurred in the alluvial valley of the Mississippi without causing serious overflows passed to the Gulf between the levee lines without the opening of a single crevasse in the main-river levees. Such high water in past years, before the protective works had been constructed to their present size and strength, would probably have breached the levees in many places and overflowed many acres.

The Act of May 15, 1928, authorized the expenditure of $325,000,000 over a period of ten years for flood protection in the Mississippi Valley. Promptly after passage of this Act, work was begun on the adopted project. The $24,000,000 appropriated the first year was spent on strengthening protective works at places where the 1927 flood had shown they were weakest. This year the appropriation is $80,000,000, and it is being expended in further strengthening of main-river protective works and in starting protection levees in the side basins where the river naturally overflows.

Engineering of the Mississippi River has two purposes: improvement of navigation, and control of floods so as to protect adjacent alluvial lands from overflows.



COURTESY CORPS OF ENGINEERS, U. S. A.

Steel cables are used in the weaving of willow mattresses for bank protection

Commission to direct

BOTH the works for navigation and those for flood control have always been executed by the Army Engineers. Until 1928, the Mississippi River Commission, composed of three Army Engineers and four civilians, directed the work. Execution was under the supervision of Engineer officers of the Army. Now the Mississippi River Commission directs the work as before, but it does so under supervision of the Chief of



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No longer do scientists accept the idea of a fixed "span of life". They know that the average length of life is longer in some countries than in others. They know that babies fare more safely in the world —that people everywhere face fewer dangers today from contagious and other diseases.

While the average length of life has increased by 10 years since 1901, the improvement has been achieved mainly among the younger ages, leaving as our most pressing problem the protection of the lives of those who have passed middle age.

One by one the perils which formerly caused untimely deaths are being conquered. "Witches" are not burned nowadays to stop plagues. On the other hand, sanitation, vaccination, inoculation and other scientific means are employed to prevent most of them.

People are learning the effect of fresh air, sunshine, cleanliness, proper breathing and exercise, sleep and a well-balanced diet. An annual medical examination for the discovery and correction of physical impairments before they have progressed too far to be remedied will help keep the body sound.



In the United States and Canada there are more than 2,500,000 people between 70 and 80 years of age; more than 600,000 between 80 and 90; fifty-odd thousand between 90 and 100; and about 5,000 past the century mark.

The person who plans wisely to live to a happy and ripe old age never forgets that the mind is a powerful influence and that physical troubles are apt to follow a morbid viewpoint.

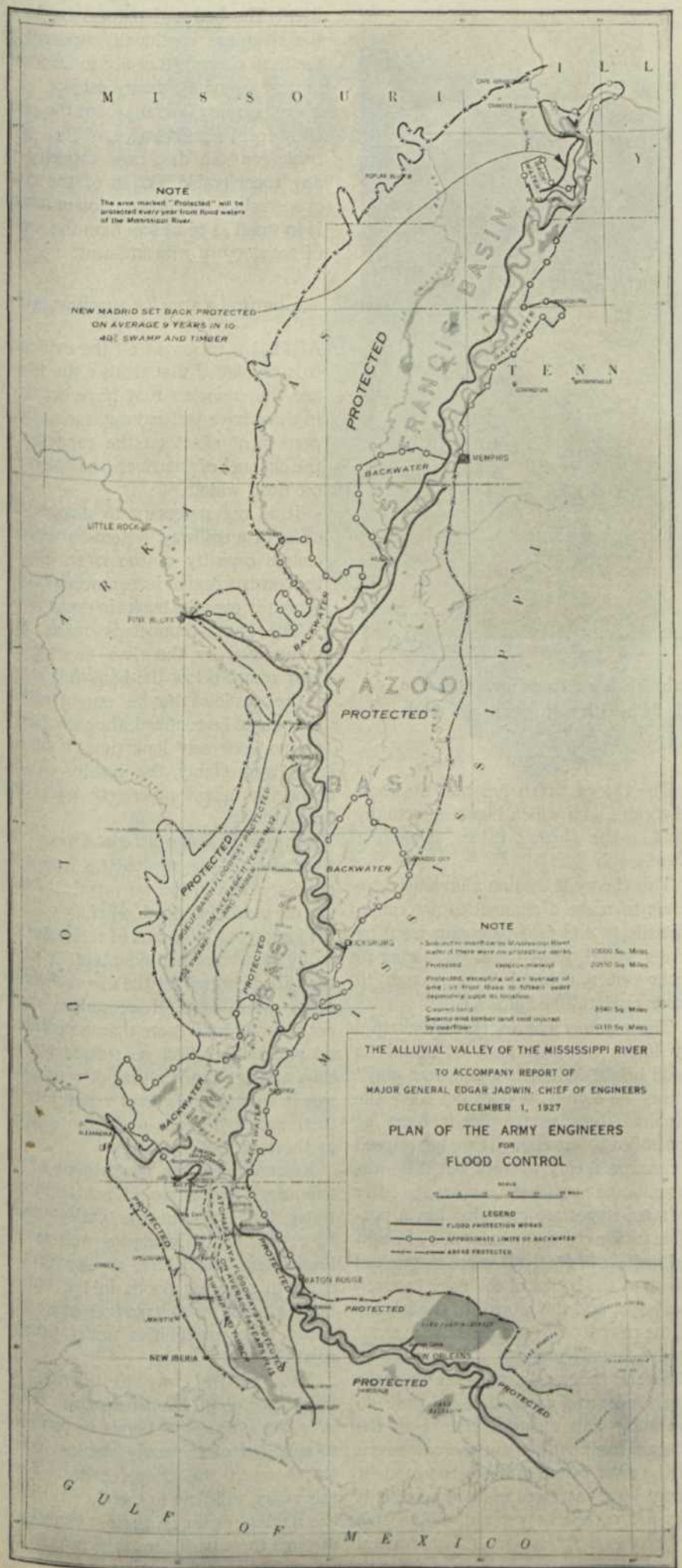
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Army Engineers and direction of the Secretary of War. Although there are theories which link the flood-control structures and the navigation improvements and which claim that the control of floods causes the flood waters to improve navigation channels by their own action, there is little to substantiate these theories.

It is true that bank revetments serve to prevent bank caving which in turn keeps earth out of the river channel and also saves levees from caving. These revetments therefore, serve both navigation and flood control. However, although some structures serve both purposes, it is not proved that the flood waters themselves are forced to effect material improvement of the navigable channel.

Low lands often flooded

THE lands bordering the Mississippi River below Rock Island, Ill., some 1,550 miles above the mouth, have always been subject to overflow from floods, and man has sought to protect these fertile fields and make use of them for agriculture without incurring the damage incident to overflows.

From Rock Island south to Cape Girardeau, Mo., on the west side, and to Cairo, Ill., on the east side (about 500 miles), these lands are comparatively narrow. Their protection is not as vital, therefore, as is the protection of the alluvial valley proper, south of Cape Girardeau. These comparatively narrow lands are generally from three to five miles wide, while the broad alluvial valley south of Cape Girardeau is some 50 miles wide and about 600 miles long, if measured in a direct line (1,000 miles by river).

From the earliest times protection has been obtained in varying degrees by levees. The inhabitants first obtained local protection by throwing up earthen mounds around their individual plantations.

Then there were combinations of owners and communities, that protected large areas by levees.

Levee districts were formed and chartered in each state until there were about 27 of these districts in the alluvial

Appropriations of $54,000,000 already have been made during the two years the flood-control program has been under way

valley proper, in addition to those north of the valley.

For many years the Federal Government carefully refrained from accepting any responsibility for flood protection. Then, in 1879, the Mississippi River Commission was formed by the Government and charged with making surveys and studies of the Mississippi. For years thereafter the primary function of the Federal work was the improvement of navigation, with flood control incidental.

It was claimed and assumed that levees and bank revetments for flood control improved the navigable channel and that the United States had no responsibility except for this purpose. More recently legislative acts have frankly authorized Federal money to be spent for flood protection without regard to navigation.



COURTESY CORPS OF ENGINEERS, U. S. A.

Concrete slabs such as these are effective against Old Man River's gnawing teeth

For years the federal funds could not be spent for levees unless local interests contributed a material proportion of the cost. Local contributions were turned over to federal authorities, who did the work. However, local contributions have been reduced until now local interests in the alluvial valley provide only right of ways for levees on the main river. North of the alluvial valley proper and on tributaries subject to backwater, local interests provide right of ways and contribute one-third the cost of the flood-protection works.

Can the River be harnessed?

DURING the 30 years that the Federal Government has been actively engaged in Mississippi River work, many theories have been advanced for the river's improvement. Nearly all of these have aimed at using the force of the water to accomplish the desired results. It cannot be denied that in certain ways this is possible and that to some extent it is practicable and has produced some desired results.

However, never have these results been as great as expected, nor have the theories been proved conclusively.

The theory which has had the most advocates, and which has been actually tried to the greatest extent, is that of "levees only."

This theory is that an alluvial stream tends to make a channel to accommodate itself, and that its confinement by levees would cause the flood waters to scour out a channel large enough to accommodate flood flows.

The confinement of the Mississippi by levees has substantially raised its flood heights. Even if the "levees only" theory be correct, it does not solve the problem, because the floods must be controlled before enough time has elapsed for such a theory to work out. The water must be provided for now, and after extreme stages are provided for, a possible future enlargement in size of channel is of little practical value. A gradual filling of the banks of the river between the levees and the growth of the islands in the river tend to counterbalance scour in the channel proper.

Several thousand cross sections of the river measured from time to time do not show any material change in the channel itself. Although the confinement of the river between levees has brought about large increases in flood heights, it has not caused as yet any cumulative changes in the elevation of the river bed itself. The bed and natural banks of the river are continually undergoing the local changes that are to be found in any alluvial stream subject to a widely varying discharge, but the gross effect of these changes of bed and banks on the discharge capacity of any considerable section of the river proper, since the construction of levees, is so small as to be less than the limits of accuracy of measurement.

Channel capacity unchanged

AFTER a review of all the evidence, it is concluded that neither the levees nor the crevasses that have occurred in them have yet had any measurable permanent effect on the capacity of the channel of the river itself to carry off flood waters.

It is not necessary to discuss the effect of a spillway system on the discharge capacity of the river. Before the construction of levees, water spilled generally over the banks in every flood.

The river channel is made and maintained by the river flowing the year round below the bank-full stage. If the overflows that last only a limited time could be confined, they would not for an extremely long time, if at all, affect appreciably the results of the channel-forming processes operating continuously.

Unproved theories concerning the river channel as affected by levees or relief spillways have no practical bearing on plans for flood relief.

Flood relief by means of reforestation or by reservoirs has no place in practical flood control for the alluvial valley of the Mississippi. Reforestation could not possibly have more than an incidental and minor effect on reducing flood stages. When the Mississippi watershed was in its original state of virgin forests, there occurred floods probably as great as those of modern times.

Reservoirs at the headwaters of all tributary streams would not store the water that falls in the valley itself. Reservoirs in the valley as well as the headwaters would have an appreciable effect in reducing floods in the valley, but their cost for this purpose alone was found to be prohibitive under present conditions.

The practical way to provide for flood control of the Mississippi River is to cause excessive floods to continue to spill out of the main channel when stages reach the danger point. Then this water will flow to the Gulf through the natural drainage basins. Overflows through these basins must be limited by

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natural ridges supplemented by secondary levees whose location is determined on the economic basis of how much value they protect, after protection of life is provided for.

The water within the river channel does no damage and flows to the Gulf with the most efficiency because of its high velocities. It should be kept within the channel as long as possible. The excess above the safe carrying capacity of the main channel must be spilled through safety valves.

The existing project provides for protection against what the best experts estimate as the greatest possible flood. This maximum flood, these experts say, may occur on an average of only once in two hundred years.

It is a flood, which, if it were confined, would produce an estimated stage of from 63 to 66 feet at Cairo (corresponding to a discharge of from 2,250,000 to 2,450,000 second feet); a stage of 74 at Arkansas City (corresponding to an outflow of about 2,850,000 second feet); and a flood with a discharge at the mouth of Red River of about 3,000,000 second feet.

Above Cairo, the projected flood is to be confined between the riverside levees, since it can be thus confined with levees not of excessive heights (about 20 feet).

Conquering the superflood

OPPOSITE Cairo, the river-bank levee on the west side of the river is to be lowered to an elevation corresponding to 55 feet on the Cairo gauge, and a new levee is to be constructed about five miles back at an elevation corresponding to 60 feet on the Cairo gauge. With this set-back floodway available, the stage of the projected superflood will be held to one foot below the elevation of the top of the main-line levees in this locality.

From New Madrid south to the Arkansas River, the superflood is to be confined within the river-side levees.

Just below the Arkansas, the existing levee is to be left as a fuse plug or relief levee, some 35 or 40 miles in length and with a crown elevation generally about three feet below the top of the proposed levee grades.

This situation is to be brought about by leaving the present levee in the vicinity of Arkansas City at its existing height, and raising all the other levees three feet.

The good lands in the Tensas Basin on the west side are to be protected against water flowing over the top or through the fuse-plug section by levees and natural ridges that will bound the Boeuf River's bottoms southwards to below Sicily Island, where the backwater area at the mouth of the Red River begins.

Floodway above New Orleans

BELOW the mouth of Red River the existing levee will be another fuse-plug section at the head of the Atchafalaya Basin, consisting of the present levee at its present height. The main-river levees other than the fuse-plug section, will be raised about three feet. In the Atchafalaya Basin there will be protection levees to confine the water to the lowlands and to protect the good lands. Just above New Orleans, near Bonnet Carre, there will be a controlled spillway emptying into a floodway about five miles long and one to two miles wide, which will empty into Lake Pontchartrain.

The main river at Cairo will carry about 1,900,000 second feet and the set-back floodway about 450,000 second feet.

At Arkansas City the main river will carry about 1,950,000 second feet and the remainder of the flood will go down the Boeuf Basin.

At the latitude of the mouth of the Red River, the main river will carry about 1,500,000 second feet and the remainder can go down the Atchafalaya Basin, which includes the Atchafalaya River with a discharge capacity of about 500,000 second feet.

At Bonnet Carre 250,000 second feet can be taken out of the main river, leaving around 1,250,000 second feet to go by New Orleans at a stage of 20 feet or under.

The floodway from Cairo to New Madrid will have a minimum width of five miles. The width between the protecting levees on the Boeuf Basin will be from ten to twenty-five miles, and in the Atchafalaya Basin from twelve to twenty-five miles. The excess waters that will flow through the fuse-plug sections and down the lowlands in the side basins will rarely, if ever, be as much as the amounts that were used in computing the protection to be provided in these basins.

The levees that will protect the valley against the superflood will have a section that will be ample to include the line of saturation and will vary with the material and foundations in different localities.

For loam (the predominating material), the section will generally have a river-side slope of one on three and a half, a crown of ten feet, and a land-slide slope which will include a line of saturation, starting from the river-side slope at elevation one foot below the crown elevation and running back with a slope of one on six and one-half. The levees will vary in height generally from 20 to 25 feet, with greater heights where they cross depressions.

For protecting the levees against caving banks, the same kind of revetments used for navigation works are employed. These are made either of brush or concrete.

Below the low-water line a flexible mattress is sunk to lie on the sloping bottom. Above the low-water line the bank is paved with stone or concrete, usually laid on a gravel base. The flexible mattresses are built on barges and slid into the water, where they are anchored over their locations until they are sunk in place by dumping rock on them from barges. Banks above the mattresses are graded by hand or by hydraulic jet to the slope desired, and then paved.

The brush mattress consists of willows with diameters of from one to four inches, woven with galvanized iron cable into bundles, or fascines. These fascines are woven into a continuous mat, all in a continuous operation. The flexible concrete mats are concrete slabs reinforced with galvanized wire, and connected by galvanized cable.

A project of general interest

THE $325,000,000 to be spent in the Mississippi Valley, although it includes certain works for navigation, is primarily a flood-control expenditure. About 13,465,000 acres are to be protected. The total authorization represents an expenditure of about $25 per acre. Such a large expenditure indicates that the people all over the country are intensely interested in the Mississippi Valley, even though the benefits accrue primarily to the landowners there. When the taxpayers from Maine to California are willing that their money should be thus used no one can deny that we live in a generous country.

While the cities, towns and good lands in the Mississippi Valley warrant large expenditures for protection, the scheme of protection cannot be extended further without economic waste. Further reclamation of swamp lands with the money of all the people of the United States is not now justified. In addition, further reclamation would cost a great deal

(Continued on page 140)

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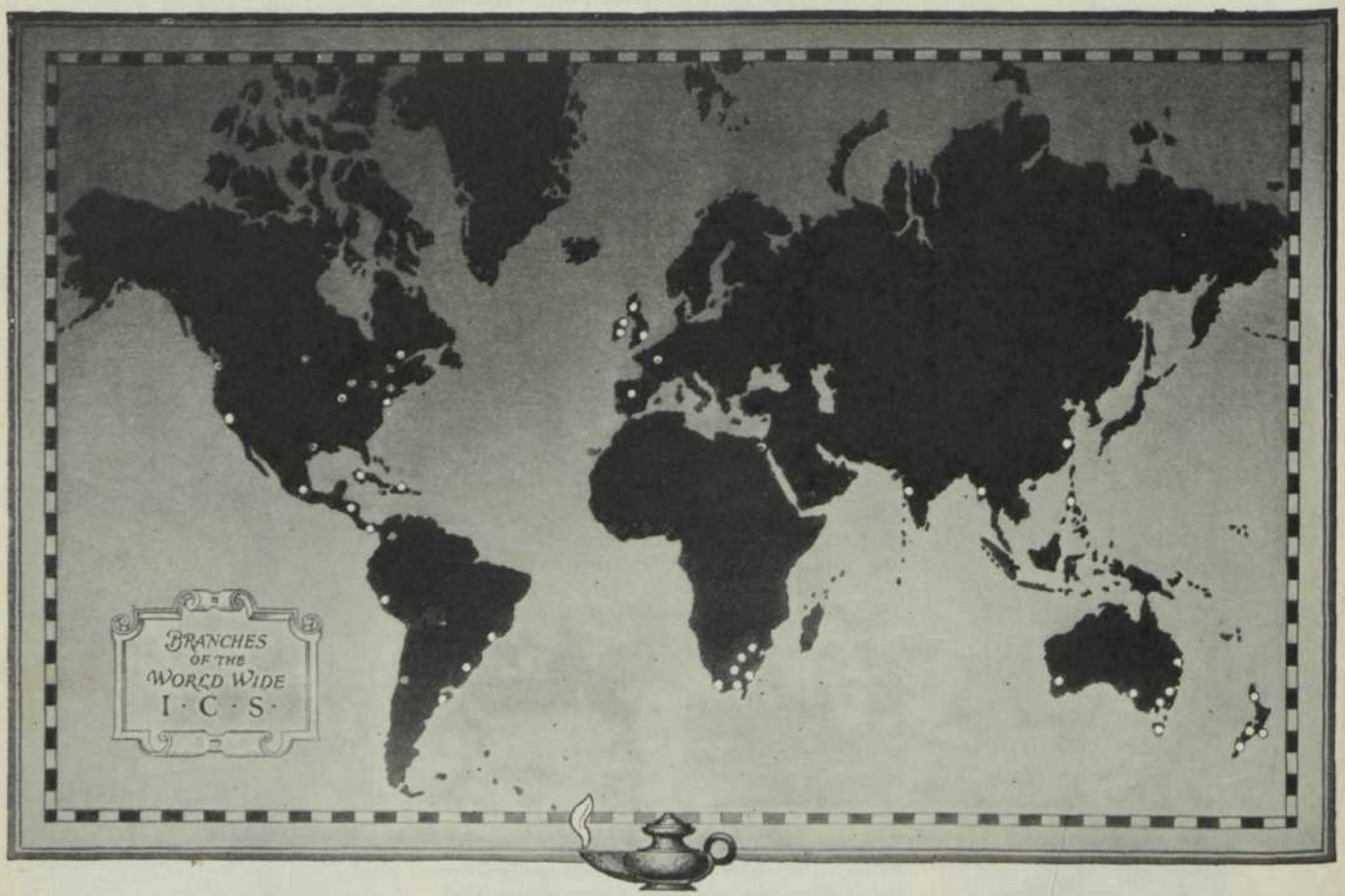






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This hotel, built by the Brotherhood at its Venice, Florida, development shows the smart style in which things have been carried forward there

A Disaster in Management

By FREDERICK A. VAN FLEET

● **GOOD management is vastly more essential to business success than is money, the Brotherhood of Locomotive Engineers has learned. This lesson in the importance of management has been costly, but the Brotherhood is standing up to its responsibilities in sturdy fashion**

PART TWO

IN ALL the story of the financial adventures of the Brotherhood of Locomotive Engineers there is no more amazing chapter than that relating to the venture in Florida lands—amazing because of its scope, amazing because of the way money was poured into it, doubly amazing because, undertaken as a quick turn to recoup losses, it dragged out into the greatest financial disaster the Brotherhood had known with losses that made previous deficits look small.

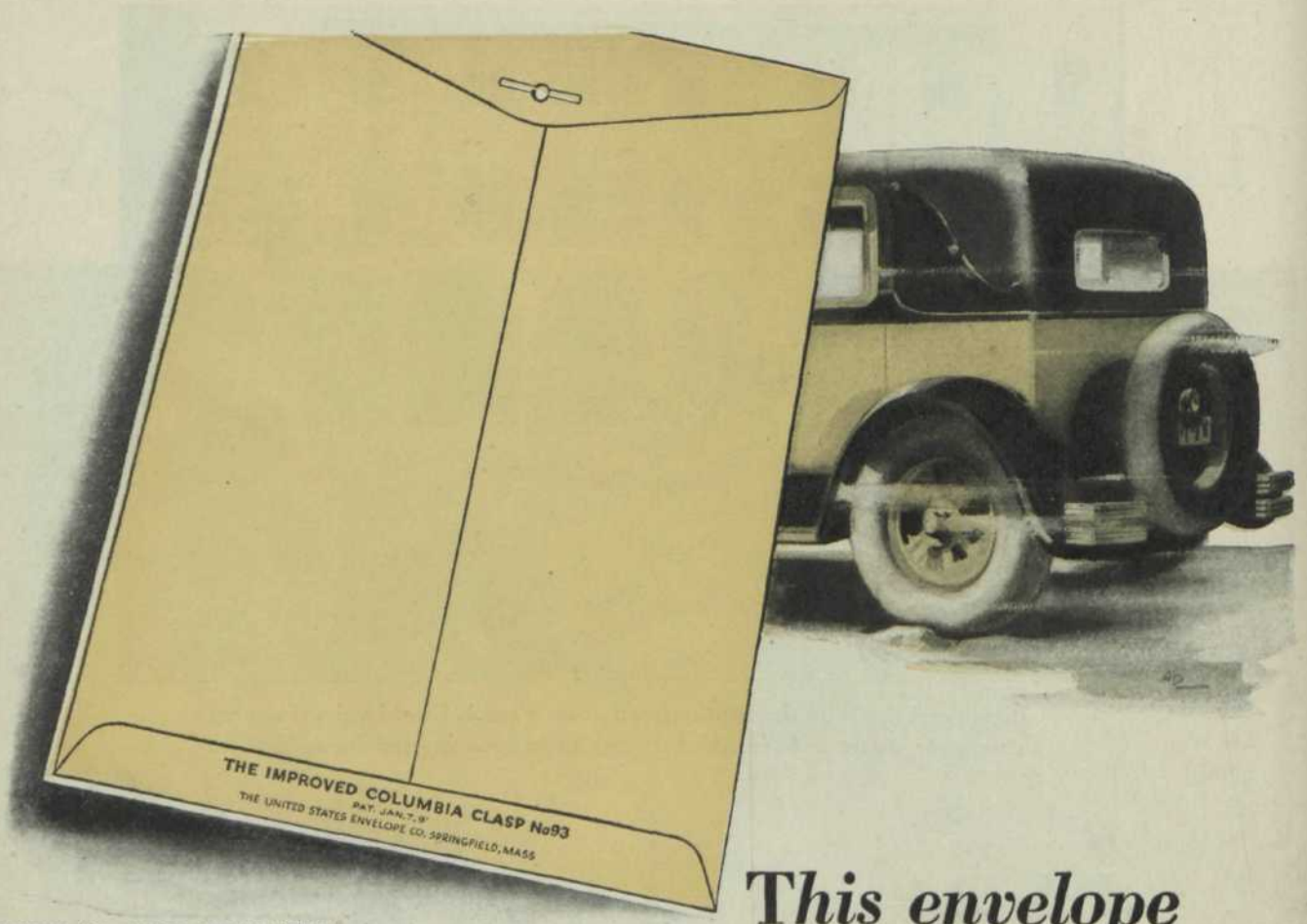
The financial history of the Brotherhood divides itself naturally into what happened before the death of Warren S. Stone and after. While that is true it is also true that the second chapter was written as a sequel to the first—that the officials left in charge of the Brotherhood only did what Stone was contemplating and would probably have done himself if he had lived.

There is one difference in the two chapters of the story. The enterprises in which Brotherhood money was invested and to which Brotherhood money was loaned before Stone's death were varied in character. With a little better luck a larger percentage of them might have succeeded even with indifferent management and the gains come nearer balancing the losses. But the Florida enterprise was all one gigantic scheme, so comprehensive in character and so infinite in detail that without wisdom, experience and ability at the helm the ship was doomed to founder before it ever left the dock.

We have seen how the Brotherhood advisory board, when it learned from Stone of the losses already incurred began looking around for some way to recoup quickly, and that Stone himself had been considering an investment in Florida lands, where much quick money had been made.

They bought at the top

AFTER the death of their leader advisory board members announced that no further expansion was contemplated. Within 60 days, however, announcement came that the Brotherhood had purchased 27,000 acres of land (after-



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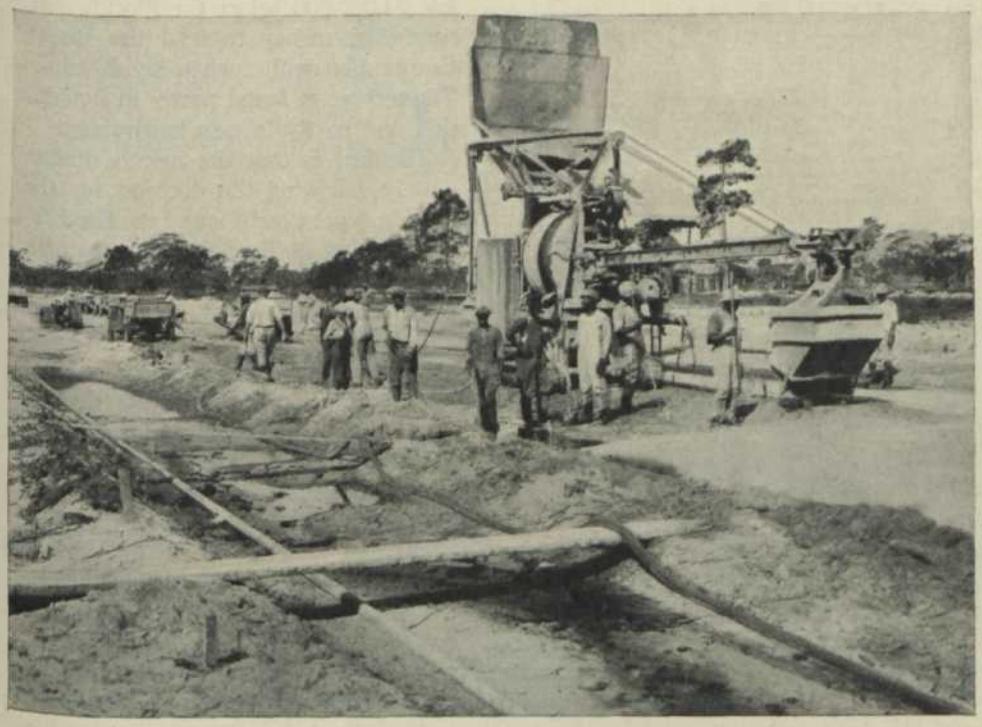
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It was decided to plat 475 acres of the Florida tract in city lots and build a carefully planned model city. Gangs were put to work and—

ward increased to 30,000 acres) at Venice, on the west coast of Florida about 30 miles below the entrance to Tampa Bay.

The intention was to invest in acreage, turn it quickly and get out with a profit. But again the investors picked the peak of the market. The boom was over, as they found soon after the purchase had been made, and they were again in possession of something other folks did not want very badly.

Too many jobs at once

THE Brotherhood Investment Company purchased the original 27,000 acres for $1,500,000. When it was found that land holding was beyond the corporate powers of the Company the Brotherhood of Locomotive Engineers Realty Corporation was formed, with $1,000,000 capital stock all held by the Investment Company.

Then the Realty Corporation bought the land from the Investment Company for $4,000,000, giving the Investment Company a paper profit of $2,500,000. Next the Brotherhood bought the Realty Company stock from the Investment Company on notes and those notes were hypothecated by the Investment Company to get money to lend to the Realty Company to improve the property.

Had the boom held, the land might have sold at a price which would have made the Investment Company's paper profit real and a large part of the Brotherhood's troubles would have been over. But the boom had passed.

The land could not be moved as acreage to show any kind of a profit and in December, 1925, it was decided to improve and subdivide the property. The tract was as large as the Hollywood development, larger than Coral Gables and by far the biggest project on the west coast. Successful subdivision seemed possible.

The resolution to improve the property was adopted by the Realty Company directors including most of the officers of the Brotherhood. They decided to plat 475 acres in city lots and build a carefully planned model city, to lay out model farms tributary to the city, build a drainage system, run a highway through the tract connecting with the Tamiami trail, build a hotel, an administration building, a golf club house and course, move the Seaboard Air Line to a better location, clear the channel for pleasure boats, and of course put in sidewalks, curb, sewers, paving, water mains and other city conveniences.

In addition, the Realty Company got ready to sell the property. A selling organization known as the Venice Company was set up, motor vehicles to transport prospects were purchased, a beach casino was built, three demonstration farms were planned and blooded stock installed. One purpose was to convince Brotherhood members and others that a farm in Venice was just the place to which to retire in their declining years. Stanton Ennes, twice general



—soon, with sidewalks, curbs, sewers, paving, water mains and other conveniences installed, the property was ready for sale

manager of the whole project, in describing the effort to sell farms said:

"Comfortable and affluent old age under his own orange trees was held out to every purchaser of five acres of Venice farm lands, and with it all there was not a man on the managing side, either as officer, employe, salesman, nurseryman, dairyman or farm demonstrator who had ever successfully done any of these things himself."

Venice to be a model city

IN THE city of Venice things were done in the smartest style. A city administration was set up, a city planner retained, a landscape architect hired and a firm of architects designated to supervise all plans. Naturally sales efforts were directed first toward Brotherhood members, although the general public was by no means ignored. By the beginning of 1926 about $2,000,000 worth of property had been sold and by summer of that same year the total had reached $4,500,000.

These sales were mostly on the deferred payment plan, however, and the pretentious improvement schemes cost a lot of money. How the development of Venice was financed has puzzled many and no official public statement has ever been made on it. One source of information on the matter is Ennes. In his brochure he gives a list of the moneys put into the Venice enterprise to and including Dec. 31, 1927, as follows:

Cash borrowed from Brotherhood Investment Co.	$6,420,222.32
B. of L. E. Securities Co. of Pa.	195,695.27
B. of L. E. Bank of Cleveland	101,700.00
B. of L. E. Securities Co. of N. Y.	101,983.53
B. of L. E. Bank of San Francisco	41,530.51
B. of L. E. Bank of Tacoma	1,049.98
Universal Finance Co. of Cleveland	55,520.63
First National Co. of Baltimore	247,200.00
Grand International Division of Engineers	1,228,358.19
Board of Financial Trustees	1,740,781.03
Cash from payments on property and miscellaneous	1,865,000.00
Cash from sale of B. L. E. Realty bonds	2,393,800.00
Total	$14,592,841.26

At this same time, Dec. 31, 1927, Ennes declared that the Venice enterprise owed in addition $1,237,873.58 on the purchase price of the land; $294,-167.84 for taxes and bills payable with interest, and $228,520.08 on notes payable with interest, bringing the total investment and obligation to $16,147,-402.76. Ennes' idea of the sales value of the property as of that date was about $6,500,000, which would mean a Florida loss of more than $9,500,000 to add to the $4,000,000 loss of 1925 which the Florida speculation was to make up.

It must of course be conceded that any estimate of the selling value and consequent loss or gain in a real estate transaction such as the Venice development is guesswork as long as the property remains unsold. The Brotherhood still has Venice. Values may come back in that section to make new records but they may not and carrying charges go on. It is unlikely that any fortunate combination of circumstances will let the Brotherhood out of Florida without a loss, but the amount of that loss cannot be determined until the last lot is sold.

How could the Brotherhood, having lost $4,000,000 before the Florida venture, find money to lend the Realty Corporation with such a lavish hand? The answer is found partly in liquidation and partly in new borrowings.

The fact is that the months immediately following the decision for the Florida development found the Brotherhood taking its financial eggs out of a number of perfectly strong containers and putting them all in the Florida carton.

In January, 1926, the Brotherhood sold most of its stock in the Empire Trust Company at a profit close to $600,000. In April it sold a bank building in Cleveland to another Cleveland national bank for $1,150,000, a loss of $250,000.

In July the Brotherhood's share of the Equitable building in New York, owned for something more than a year, was sold at a profit of $900,000. In the same month the Brotherhood of Locomotive Engineers Cooperative Trust Company of New York, was sold at some loss.

The next May the Brotherhood of Locomotive Engineers Title & Trust Company of Philadelphia was sold to the Mitten interests and in June the Birmingham bank was sold and reorganized as a local institution.

Growing in the West

IN THE meantime there has been some further expansion in the West, due largely to local demands of Brotherhood members. The Tacoma, Wash., bank had been opened in July, 1925, at about the same time that the parent bank in Cleveland opened its new bank building.

A Seattle bank was opened that fall and one in San Francisco in December, 1926. The Pacific Investment Company, controlled by the Brotherhood Investment Company, bought the California Investment Company and opened branches in Los Angeles and Vancouver.

In March of 1927 came the first rumble of thunder presaging storm in the Brotherhood when a prominent firm of attorneys who had been serving as counsel for the Brotherhood, wrote a letter to the officers warning them that the organization itself was drifting into a dangerous financial condition. The banks were in good shape, but their slow and doubtful paper had been sold to the



A city planner was retained to plot the business and residential sections of Venice and a firm of architects was designated to supervise all plans

S·A·F·E



Passenger transports should take no chances! . . . The S-A-F-E uses three-motored Fords to insure a wide margin of safety

Features of Ford Plane

All-metal (corrugated aluminum alloys)—for strength, uniformity of material, durability, economy of maintenance, and structural safety.

Tri-motored (Wright or Pratt & Whitney air-cooled engines, totaling from 900 to 1275 horsepower) — reserve power for safety.

Speed range—55 to 135 m. p. h. Cruising radius, 580-650 miles.

Disposable load—3670 to 5600 pounds.

High wing monoplane (single, stream-lined, cantilever wing)—for strength, speed, inherent stability, visibility, clean design. . . .

17 *capacity* (including pilot's dual-control cabin) — Buffet, toilet, running water, electric lights, etc.

Durability — Uniform all-metal construction is insurance against deterioration.

Price, $42,000 to $55,000 (standard equipped at Dearborn)—Exceptionally low because of multiple-unit on-line production methods.



With great distances to be traversed . . . scattered points of rich productiveness to be visited . . . the Southwest is ideal for air transportation

SOUTHWEST of St. Louis and Kansas City is a great region that probably expresses American modernism more accurately than any other. It is rich. It is decidedly virile. It is one of the most alert regions in the world. It is logical, therefore, that this region should be the scene of one of the most pronounced and successful developments of commercial transport aviation. . . .

Colonel Halliburton, who established the Southwest Air Fast Express, has already in operation a fleet of nine tri-motored, 14-passenger, all-metal Ford planes. The S-A-F-E is right up to the minute in every phase of modern transport. Company limousines and five special aerocars transport passengers direct to and from downtown districts and the transport planes. Scheduled connections are made with all important trains.

St. Louis . . . Springfield . . . Tulsa . . . Kansas City . . . Coffeyville . . . Oklahoma City . . . Fort Worth . . . Dallas . . . Wichita Falls . . . Sweetwater! All these are connected by schedules designed to work in conjunction with the railroads . . . *so that far distant sections of the country are brought within twenty-four hours' plane-train ride of each other.*

The safety factor, as much as anything else, determined Col. Halliburton in the choice of Ford tri-motored transports . . . since three engines provide the necessary margin of safety in carrying passengers. *From the inauguration of service on April 2nd, over 2500 miles have been flown daily.*

FORD MOTOR COMPANY

Visitors are always welcome at the Ford Airport

Investment Company and that Company, in turn, guaranteed against loss by the Brotherhood.

In the meantime the Florida development was devouring capital alarmingly.

At this time the Brotherhood itself owned its stock in the Realty Company, of no immediate cash value, its original office building which had cost $1,200,000, its bank building which had cost $6,600,000, its bank stocks, which T. E. Mitten of Philadelphia estimated to be worth $3,000,000 and its stock in the Investment Company and the Holding Company.



One of the natural attractions at Venice was a beautiful beach

In other words, of property that anybody else might buy, it held $10,800,000. Against this stood mortgages for $6,500,000 on its buildings, given the insurance and pension associations, a considerable sum owed to the Pennsylvania Securities Company, and the contingent liability caused by the guarantee of part of the assets of the Investment Company. On top of this the Brotherhood had to borrow $1,200,000 to meet maturing obligations.

It is not strange that officers awaited the opening of the 1927 Brotherhood convention in Cleveland with considerable nervousness. The 1921 convention had raised the salary of its then leader, Stone, to $25,000 a year. The 1924 convention had adopted Stone's recommendation for definite participation in a political movement and had made him president of all its enterprises as well as leader of its labor matters.

With Stone gone and a financial storm of magnitude brewing what would this convention do?

The first thing the convention did was to appoint a committee of ten to investigate all the Brotherhood's affairs. This investigation was most thorough. Its report was submitted to the convention but never made public. Its contents, however, were such that charges were brought against William B. Prenter, Stone's close associate and successor as president; L. G. Griffing, first vice president; H. P. Daugherty second vice president, and C. E. Lindquist, secretary. All were removed and their offices abolished.

The convention then decided to place all the Brotherhood's financial affairs into capable outside hands, leaving the direction of labor affairs in the hands of Alvanley Johnston, reelected grand chief. The convention considered an offer from T. E. Mitten of Philadelphia to form a new corporation to take over all the Brotherhood holdings, straighten out those that needed it, and complete the Florida development. This offer was not accepted.

The convention did decide that the Brotherhood would have to support whoever undertook to handle its financial affairs. To provide a sinking fund for that purpose it authorized the issuance of 100,000 certificates of indebtedness of $100 each, bearing interest at 4 per cent. These certificates of indebtedness, known in the Brotherhood as the "Loyalty Loan" had prior lien on the earnings of Brotherhood enterprises. In addition to the "Loyalty Loan" an assessment of $5 per month for two years on the 57,000 active members of the organization was authorized.

The profits became losses

THUS the Brotherhood, instead of realizing the dreams of cooperative wealth which first started its leaders on an expansive career of financial manipulation, had undertaken to raise $10,000,000 on the Loyalty Loan from its own members and $6,840,000 by direct assessment on those same members to save the enterprises which were to be a source of wealth to the organization and, what was more important, to save the credit of the organization.

In conformity with the decision to place its financial affairs in the hands of outside experts, the Brotherhood officers concluded an arrangement, after the convention, with Col. Claudius H. Huston of Chattanooga and New York. Colonel Huston was then chairman of the board of the Transcontinental Oil



Various industries and businesses sprang up to supply the needs of the budding city, where, by the summer of 1926, $4,500,000 worth of property had been sold

There are Dollar Advantages in Natural Stone

THE business world is becoming keenly aware of the dollars-and-cents preference which the public shows for buildings faced with Indiana Limestone. Note the outstanding building projects in all parts of the country. Indiana Limestone facing is chosen because of the fine, light color-tone which makes the building an object of comment.

The public has indicated unmistakably that it is willing to pay a preference for space in these magnificent stone structures. As an investment, the Indiana Limestone building ranks high. No exterior upkeep cost is necessary to preserve the soft tone of this natural building material. The facing of Indiana Limestone remains beautiful year after year.

Large scale production and the facilities of Indiana Limestone Company make this stone moderate in cost. No matter in what part of the country you are situated, you will find it possible to build of Indiana Limestone for only slightly more than if less satisfactory materials were used.

Let us send you a booklet showing various types of modern office buildings. We have a representative in your vicinity who will gladly answer questions regarding Indiana Limestone and this company's service. Would you like him to call? For the booklets or other information, please address Box 740, Service Bureau, Bedford, Ind.



Chicago Daily News Building, Chicago, Ill. Holabird & Root, Architects. Hegeman-Harris Company, Builders. One of a number of Indiana Limestone buildings recently erected in Chicago.

(At Left) Fountain, Chicago Daily News Building.

INDIANA LIMESTONE COMPANY

General Offices: Bedford, Indiana *Executive Offices:* Tribune Tower, Chicago

The Provident *Thrift Policy*

COMPLETING THE CIRCLE OF PROTECTION

What It Will Do For You

If you live . . . it pays you $10,000, or the face value of your policy, at age 65. This plan establishes a capital quietly accumulated during your productive years to take care of you in your old age.

If you die . . . before age 65 your wife or children or heirs will receive $10,000 cash, plus any accumulations. A monthly income (plus excess interest) may be taken in place of the principal sum. Double the amount of the policy will be paid if death results under conditions covered by the Accidental Death Benefit Provision.

If you become totally and permanently disabled . . . before age 60—you, yourself, will receive $100 per month and will be relieved of paying any further premiums, while such disability lasts. Moreover you will receive the regular annual dividend. In addition to these benefits your policy will be paid in full at your death; or if you are living at age 65 the $10,000 cash will be paid you as described above, and the disability income will continue so long as you remain totally disabled.

NOW . . . *while you are insurable*

and can spare the money, let us tell you how small a yearly saving will put this Thrift Policy into action for the comfort of your old age — or for your family's comfort if you die. Just fill in the information called for on the blank below and mail it to us and we will send you full particulars without delay.

Low Rates Low Cost . . .

Provident Mutual

Life Insurance Company of Philadelphia, Penna.

Founded 1865

. . . Mail this coupon NOW!

You may send me full information and quote premium rate for a $ Provident Thrift Policy, on the understanding that it places me under no obligation.

I was born _____ (Month) (Day) (Year)

My name is _____

My address is _____

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Co. He organized the Brotherhood Management Corporation, of Delaware, and was its president until he resigned to become chairman of the Republican National Committee.

It was no small job that Colonel Huston undertook. One indication of the size of the job is found in the recent statements at the Brotherhood Investment Company. A financial statement bearing date of April, 1929, put the company's deficit at $3,721,725.96. Later a more detailed statement as of December 31, 1928, placed the deficit at $9,597,346.29. This statement, although antedating the other, is supposed to be the latest setup and was issued after the other.

One suit asking the appointment of a receiver for the Investment Company was instituted, but Federal Judge Jones in Cleveland refused the petition, declaring that it would be unwise, on the application of two stockholders, to disregard the interests of the majority by appointing a receiver.

The Brotherhood Investment Company, it will be understood, was the very heart and center of the Brotherhood financial enterprises. Practically every transaction had cleared through it in some way or other.

In good shape now

THE men now handling the Brotherhood's affairs are satisfied that the Brotherhood is solvent, and that if disgruntled investors and creditors will be patient the unscrambling process will be successfully carried out and everybody who had money coming will finally get it. The banks are sound, the office building has always been successful, the bank building is doing better than at any time since its construction and the Florida real estate is being carried at the lowest possible expenditure until conditions are more favorable to its sale.

The Brotherhood's present situation seems to be that the good assets it has, and they are large, are very good and that the doubtful assets, which are also large, are so very doubtful that not much can be expected of them in the near future. The middle ground has all been cleared out.

In the meantime, the Brotherhood has learned a most valuable lesson in finance. As an organization it is standing up to its responsibilities in sturdy fashion.

For members of the Brotherhood have learned that while management in business can often succeed without much money no amount of money can bring success without management.

LET HIM RING THAT DOORBELL FOR YOU ON CHRISTMAS MORNING

. . . bearing flowers, a book, cigars, cigarettes, candy, a message — whatever you wish to send for Christmas

AT that door where your heart turns in friendship or love—there, no matter how far away, you can speed the Postal Telegraph Messenger—happy aide of Santa Claus. On Christmas morning, with his own "Merry Christmas", he presents the gay envelope containing the message from you. And a gift of your selection bought for you in the distant city can go with your holiday greetings!

What a merry stir throughout the country this gift service of Postal Telegraph creates. An ideal Christmas present, magically spanning distance, arrives at the right moment. And with it your greeting ablaze with holiday colors.

Yet, how easy is this gracious deed of yours. Your local Postal Telegraph office and that in the distant town join in this service. Without extra charge. Christmas morning the Postal Messenger delivers your greeting and your gift.

* * *

Also, at your command, and at surprisingly low holiday rates, a cablegram greeting can be sent via any Postal Telegraph office over the International System to Europe, Asia, the Orient, the West Indies, Central and South America. Or a radiogram to those on ships at sea.

Crisp bills for stockings, funds for Christmas buying, bonuses for the home-hearth — tremendous treasures speed during the holidays over the Postal Telegraph throughout America and on to distant homelands over the sea.

Suggestions on greetings and gifts for individuals and organizations are available at all Postal Telegraph offices. Do your Christmas giving via Postal Telegraph!



TRIMLY UNIFORMED, alert, willing, courteous. Taking messages and delivering messages everywhere in America. Speeding them on their way all 'round the world. Running errands, carrying packages. Saving trouble. Spreading cheer . . . The Postal Telegraph Messenger is a swift aide to Santa Claus.

TELEGRAMS CABLEGRAMS RADIOGRAMS

Postal Telegraph

Commercial Cables All America Cables Mackay Radio

ECONOMIC FACTORS
OF BUSINESS AND FINANCE

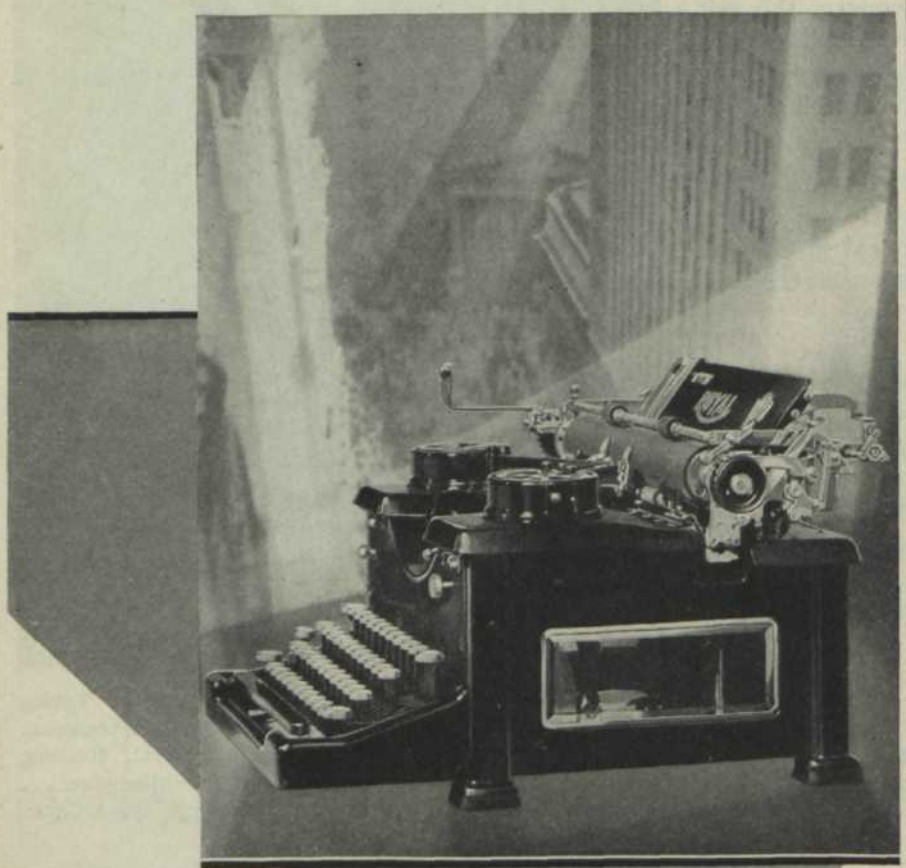
In New York's great financial district, the office affairs of vast institutions move swiftly — smoothly — in the service of the entire world. Here the Easy-Writing Royal functions as an integral part of the machinery of business driven at its utmost. ▲ ▲ ▲

In this light-running typewriter are embodied all the factors that executives recognize as essential to the conduct of present-day high-pressure activities. ▲ ▲ ▲

In your own office observe Royal's flashing speed — its matchless ease of operation, unvarying accuracy and greater durability Compare the Work.

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BRANCHES AND AGENCIES THE WORLD OVER



The Easy-Writing Royal Typewriter is priced $102.50

ROYAL
TYPEWRITERS

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Organized Business Talks Things Over

TWO noteworthy assemblies of American business men were held at Columbus, Ohio, and Ogden, Utah, during September and October. At the first city was held the third mid-year conference of the United States Chamber of Commerce, while at the second occurred the seventh annual meeting of the Chamber's Western Division.

Major activities of the Chamber and progress made toward effecting the aims of that organization were discussed at the Columbus conference, which was attended by the Chamber's national councillors, other officers and committeemen, and presidents and secretaries of member organizations.

Vice President W. Rufus Abbott, of the Chamber, outlined the Chamber's program at the opening session on October 14. National Councillor J. S. Crutchfield led the discussion that ensued. Julius H. Barnes, chairman of the Chamber Board, spoke at the luncheon on "The Business Horizon."

Fred W. Sargent, chairman of the committee on Federal Taxation, opened the afternoon meeting with a plea for immediate reduction of federal taxes. Open discussion of the subject followed.

Vestal speech draws notice

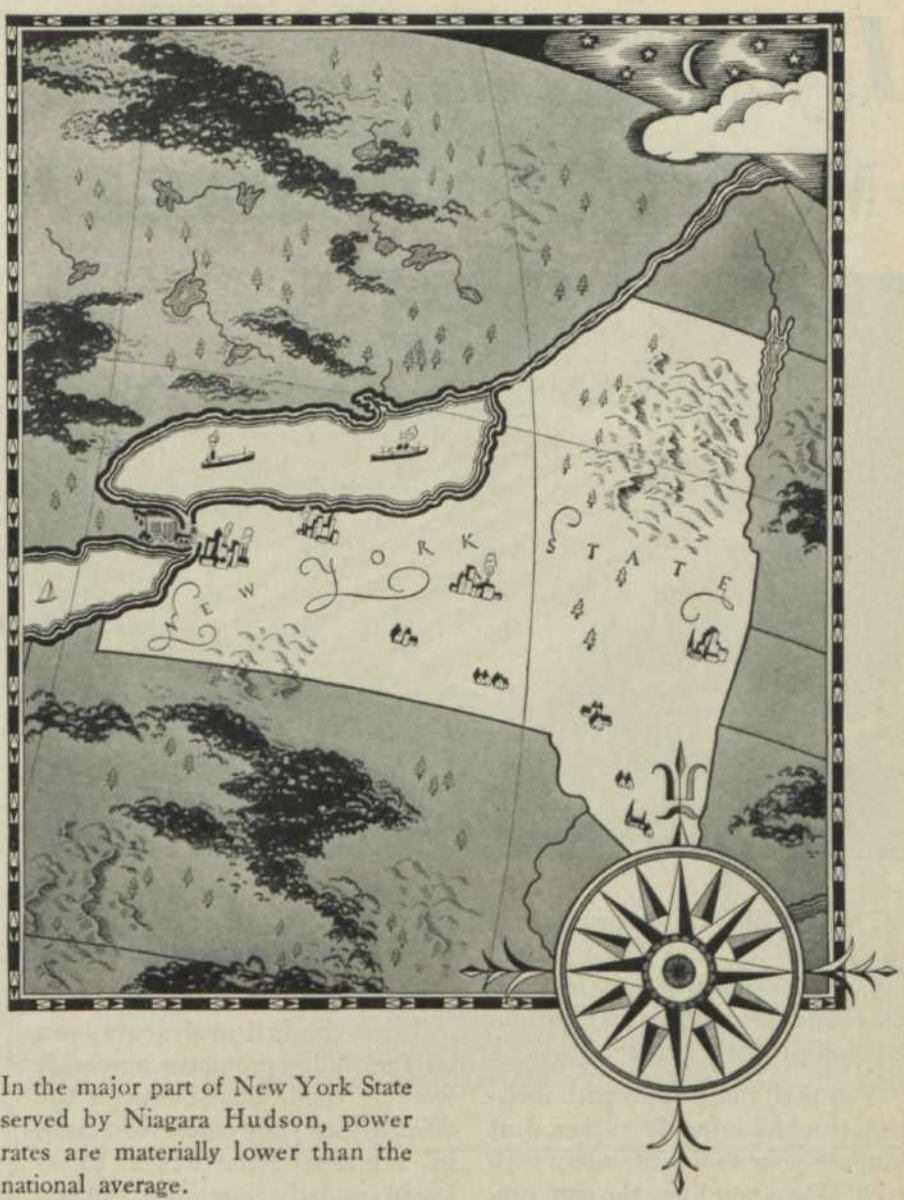
GOV. M. Y. COOPER of Ohio and Representative A. H. Vestal spoke following the evening banquet, the latter's address on "The Value of Business Opinion in Congress" drawing wide attention in the press the following day.

Round-table discussions occupied the second morning session and these were followed in the afternoon by consideration of agricultural legislation and aviation, with Charles C. Teague, of the Federal Farm Board, Edward S. Evans, president of the Detroit Aircraft Corporation, and Richard F. Hoyt, chairman of the Chamber's Committee on Aviation, leading the program.

Resolutions were adopted opposing discrimination against American-owned trade-marks and patents, and favoring cooperation of business in the censuses of manufactures and distribution, development of inland waterways and natural resources, increased attention to street and highway traffic problems, and encouragement of commercial aeronautics.

President William Butterworth, in the

Your plant belongs where your Market is



IN the days when production costs were industry's chief concern, plants flocked to New York State. They came because water power, labor and raw materials were plentiful.

Today, when industry's chief problem is the cost of selling and distributing goods, New York State is more than ever the ideal location for a plant.

The greatest market in the world is concentrated around New York State. Forty-nine per cent of the nation's people, 55% of the nation's wealth are east of the Mississippi and north of the Ohio.

53 railroads blanket New York State with 8,400 miles of track. These are so intimately linked with a modern system of highways, waterways, lake and ocean ports that goods can be shipped directly and economically to any point in this country or foreign lands.

A wealth of raw materials is either in the state or cheaply obtainable by water from Canada or the West.

In the major part of New York State served by Niagara Hudson, power rates are materially lower than the national average.

The individual labor output in New York ranks among the highest in the land. There is an unlimited supply of skilled workers. 242 of the 264 industries mentioned by the U. S. Government are reported in this state. This insures stable, settled working conditions.

If you are interested in a more detailed discussion of New York's industrial advantages, write today for a new book, "New York, the Great Industrial State."

It contains new and authentic information and is sent to you without a personal follow-up of any kind. Address Niagara Hudson Power Corporation, Albany, N. Y.

This book sets forth in crisp, tabulated form the essential facts about 44 of the industrial centers served by Niagara Hudson, as follows:

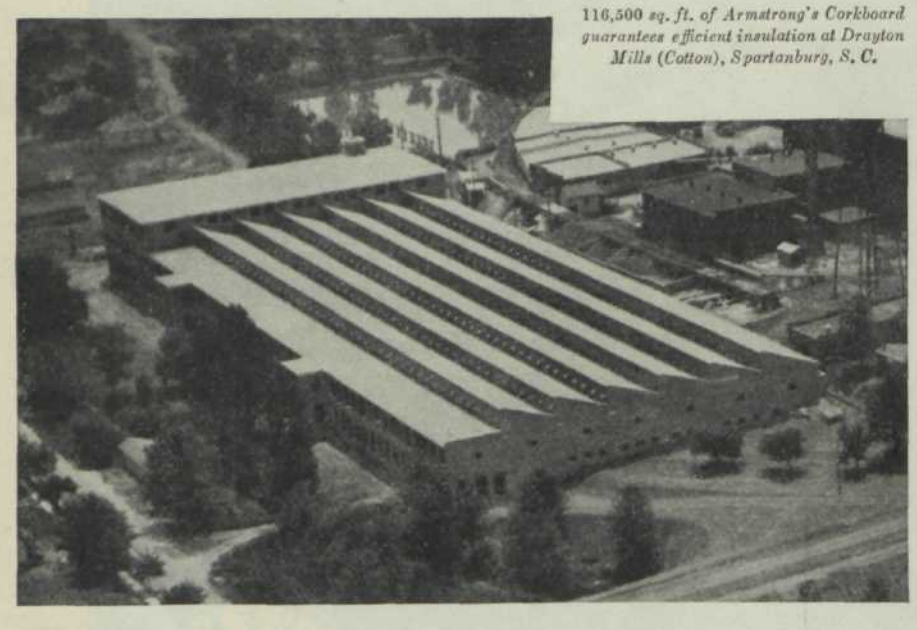
ALBANY	LOWVILLE
ALBION	LYONS
AMSTERDAM	MALONE
BATAVIA	MEDINA
BUFFALO	MOHAWK
CARTHAGE	NIAGARA FALLS
COHOES	N. TONAWANDA
CORTLAND	OLEAN
FRANKFORT	ONEIDA
FREDONIA	OSWEGO
GENESEO	PULASKI
GLENS FALLS	RENSSELAER
GLOVERSVILLE	ROME
HERKIMER	ROTTERDAM
HUDSON	SCHENECTADY
HUDSON FALLS	SKANEATELES
ILION	SYRACUSE
JAMESTOWN	TONAWANDA
JOHNSTOWN	TROY
LACKAWANNA	UTICA
LE ROY	WATERTOWN
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Is your roof threatened with MOISTURE DAMAGE?



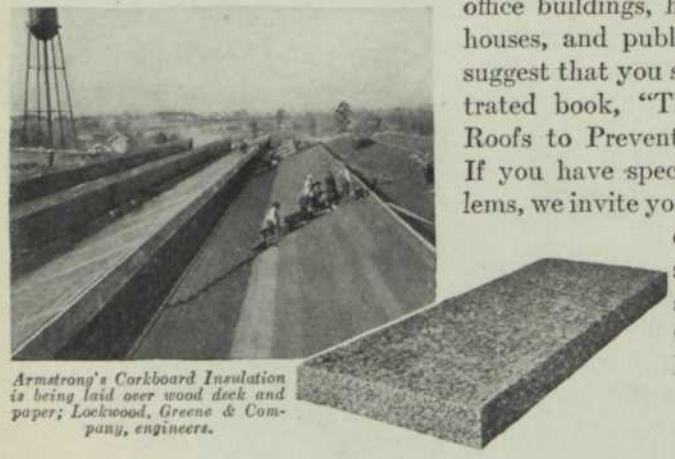
116,500 sq. ft. of Armstrong's Corkboard guarantees efficient insulation at Drayton Mills (Cotton), Spartanburg, S. C.

DANGEROUS drops of moisture . . . are they gathering on the ceilings of your factory? Do they damage goods and machinery and cause roof rot?

You need not put up with moisture troubles in cold weather. Just insulate your roof adequately with cork. When you have the sure protection of Armstrong's Corkboard, condensation is avoided. The temperature of the ceiling remains above the dew-point. All this, because cork reduces heat losses through the roof.

This saving in heat also cuts down on fuel bills—promotes agreeable working conditions—increases the efficiency of your employees. And, in summer, Armstrong's Corkboard Insulation keeps heat out, assuring you all-year-round comfort.

You can secure all these advantages not only in the factory but in office buildings, hotels, apartment houses, and public buildings. We suggest that you send for our illustrated book, "The Insulation of Roofs to Prevent Condensation." If you have special roofing problems, we invite you to call upon our engineers. Armstrong Cork & Insulation Co., 903 Concord Street, Lancaster, Penna.



Armstrong's Corkboard Insulation is being laid over wood deck and paper; Lockwood, Greene & Company, engineers.

Armstrong's Corkboard Insulation

For the Roofs of All Buildings

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closing address, asked increased use of the facilities and services provided by the National Chamber.

At the Western meeting

THE Western Division meeting opened on September 30 with 412 delegates, drawn from the 11 western states and Hawaii, present. Paul Shoup, president of the Southern Pacific Company and Western Division vice president, outlined the importance of the Chamber to business men in his opening address.

Frederick J. Koster, vice president of the California Chamber, gave the leading address at the first morning session, which was devoted to western industrial development. Water resources of the West was the theme of Raymond B. Wilcox and W. D. B. Dodson, president and general manager respectively of the Portland Chamber, at the luncheon meeting.

Dr. Walter Mulford, of the University of California, gave the principal address at the afternoon session, which was devoted to forest conservation. President Butterworth and Governor Baldridge of Idaho addressed the banquet meeting.

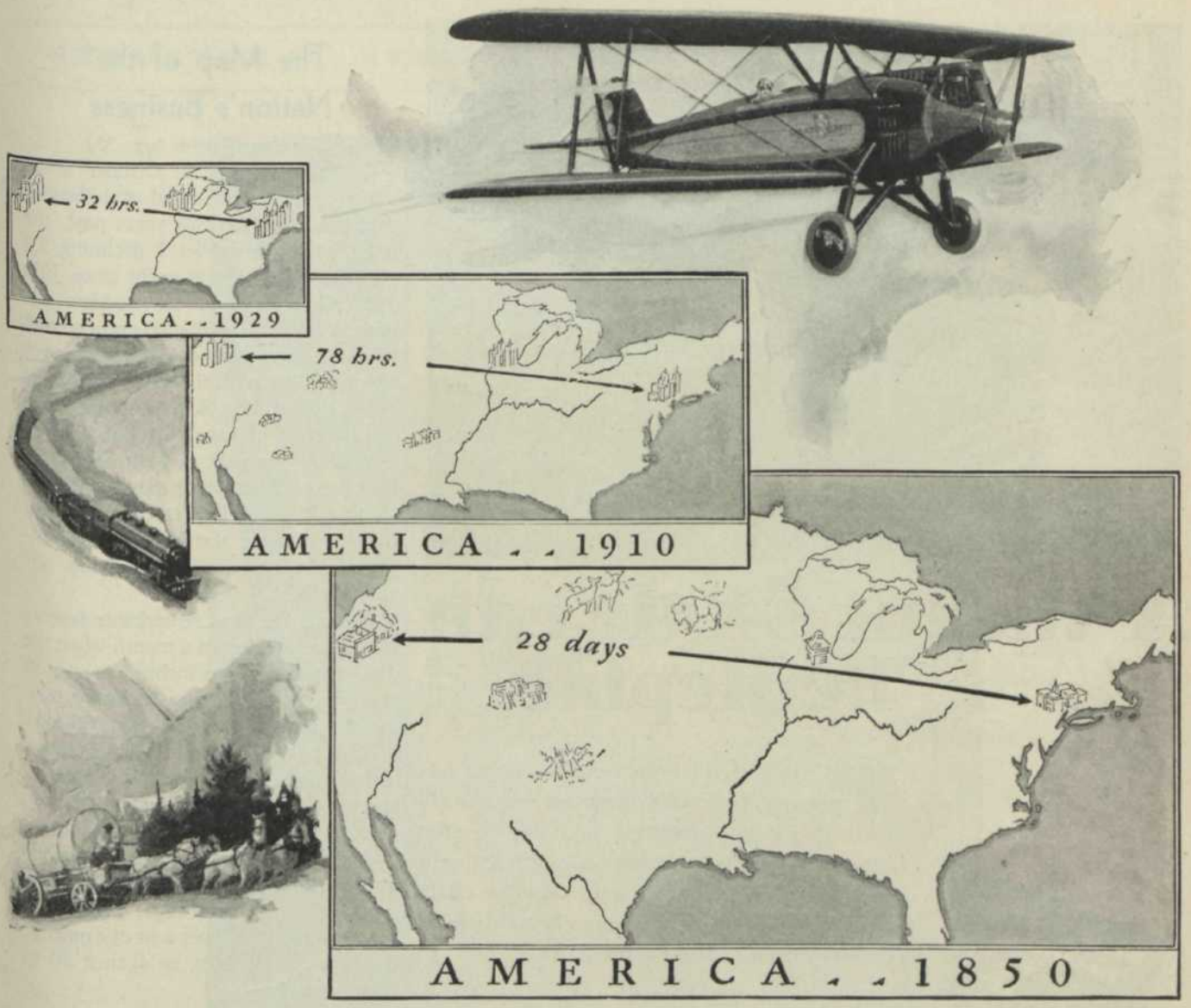
The second day's program opened with a breakfast tendered presidents, secretaries and national councillors by President Butterworth, who spoke informally. D. A. Skinner, secretary of the National Chamber, explained the national organization's work.

Reclamation was the keynote of the morning meeting, with Dr. Elwood Mead, commissioner of reclamation, Interior Department, as the speaker.

An animated discussion of Mexican immigration marked the afternoon session following addresses on the subject by Dr. E. G. Peterson, president, Utah State Agricultural College, P. G. Spilsbury, president, Arizona Industrial Congress, and Ralph H. Taylor, executive secretary, California Agricultural Legislative Committee. President Butterworth announced that further information on the matter would be developed by Manager F. Stuart Fitzpatrick, of the Chamber's Civic Development Department, during a tour of California and Arizona.

A resolution was adopted calling on the National Chamber to seek a complete investigation of the subject by a Federal Commission before any restrictive legislation is undertaken. Other resolutions favored forest conservation, mineral surveys, development of water resources and federal reclamation.

Portland was chosen for the eighth annual meeting.



Compact America . . .

FROM the days before the Civil War, when the Atlantic was 28 days from the Pacific—till now when a Great Lakes Sport Trainer could span the country in 32 hours—the demand for faster transportation has steadily made America more compact.

Today, the banker from New York and the business man from Texas can meet in Chicago in a few hours. Florida is a short trip for the man from Boston. California and the northwest are quickly reached from any part of the country.

The salesman equipped with a Great Lakes Sport Trainer can cover many times as much territory as he used to—in the same time—*and at a substantial saving in transportation expense,* because his plane actually embodies something new in aviation—real versatility.

It is a Cirrus-powered two-place sport training ship with a pursuit-plane complex—beautifully engineered—fast—light—and highly maneuverable—yet perfectly steady in almost any weather—dependable—extremely rugged—uses only six gallons of gas an hour and covers a hundred miles in the process.

A new and interesting booklet giving complete details and illustrations in color is ready for mailing. Send for your copy.

GREAT LAKES AIRCRAFT
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A Vacant Chair can be Replaced

THE day of the "one man" business has passed. In every organization, a well-trained junior executive is ready to step into the place of the man above. A death or a resignation—a vacant executive chair—can be replaced with scarcely a hitch in the operation of the business.

KEEP VITAL RECORDS IN A REAL SAFE

But not so when vital business records are destroyed. The labors and savings of years can be wiped out by fire, beyond hope of redemption. No replacements are available—a thriving business becomes but an empty shell. For unless your Insurance Policies, Inventories, Accounts Receivable, etc. are properly protected, you are liable to serious loss if a fire occurs.



Let us measure your degree of fire risk and recommend the proper safe.

Diebold Fire-Resistive safes furnish the correct degree of protection for every business office. They are made in a variety of styles and sizes bearing the label of the Underwriters' Laboratories.

Insure the future of your business by protecting your records in a Diebold Safe.

DIEBOLD SAFE & LOCK COMPANY
CANTON, OHIO
Represented in Leading Cities in U. S. A. and Canada

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When writing to Diebold Safe & Lock Company *please mention Nation's Business*

The Map of the Nation's Business

(Continued from page 39)

Commodity price in October broke away from the so-called stabilization that has ruled for two years past, the index as of November 1 declining 2.3 per cent to the lowest point since July 1927. Only eight of 96 products advanced in October while 40 declined and only one group out of 13 gained over October. The general level of prices as shown by the index is 16.8 per cent above the low point of June 1921, but 40.5 per cent below the peak of February 1920. Features of the month's movement were lower prices for live cattle and hogs, most provisions, textiles (notably cotton), hides and leather, vegetable oils and metals.

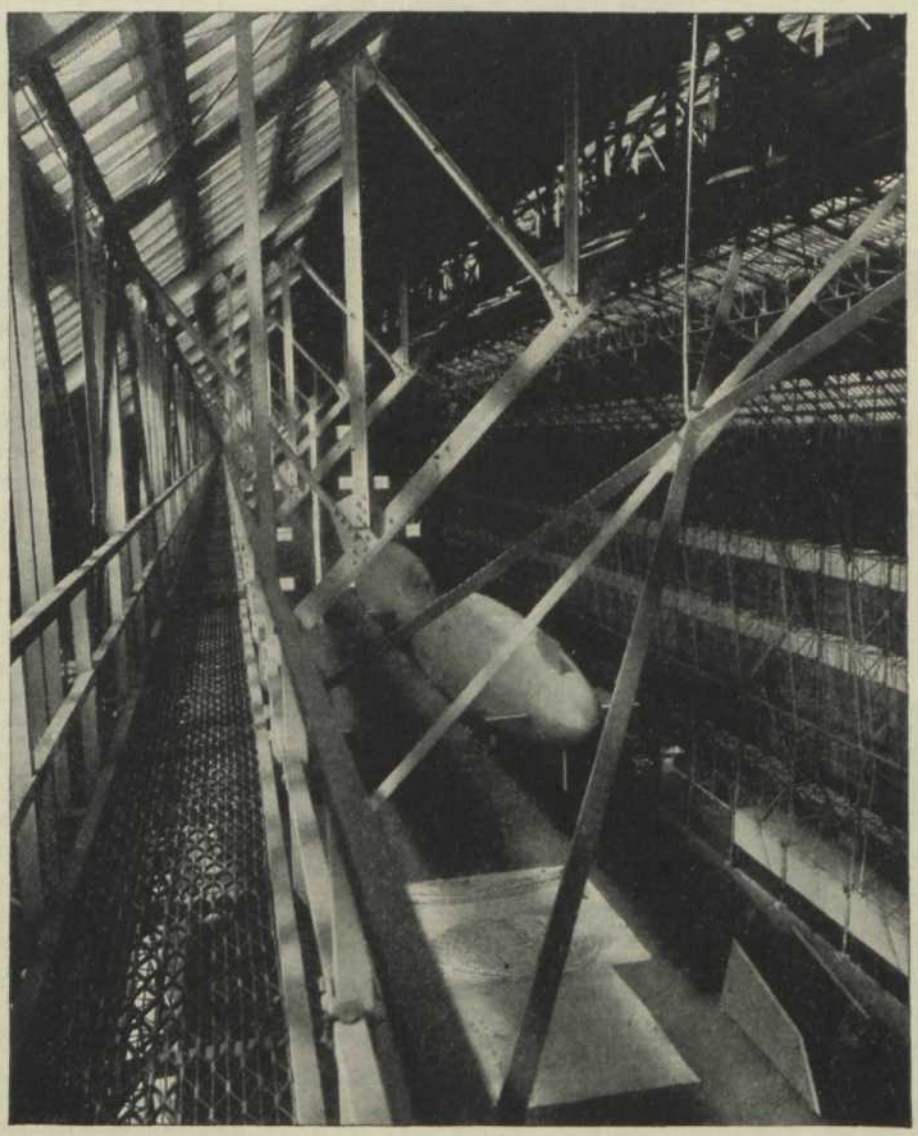
Perhaps the most remarkable feature in the steel market in a month when the mill operations were inclined to sag off slowly but steadily was the heavy buying of rails, something like 800,000 tons. This total set a record for October, usually not an active month in this respect. Other heavy products sold well, whereas lighter forms such as sheets and strips, widely used in automobile manufacturing, tended to sag in production and price. Steel-ingot production dropped to 60 to 80 per cent of capacity, the latter at Chicago, as against 80 to 85 a year ago.

Steel earnings are high

THAT the steel industry was profitable in the third quarter is indicated by the net earnings of the Steel Corporation, which fell little below those for the second quarter and which except for this were largest save in five quarters of the war years. Another gain in unfilled steel orders seems possible from the large tonnage or rails and other heavy products put on the books in October.

Additional returns of leading industries for nine months tend to show that, except in the iron, steel and automobile trades, production was generally at the peak. Petroleum and gasoline production and consumption were slightly less in September than in August but both were well ahead of the like month a year ago. For nine months crude-oil production and consumption were respectively 13.9 and 7.5 per cent ahead of the similar period in 1928. Prospects seem to indicate that the "shut-in" movement in crude production is increasing and that output of the wells

STRUCTURAL STEEL CREATED THE SKYSCRAPER



In the Modern Spirit

THE IMMENSE strength and permanent security of steel permit a wider scope of imagination in the search for means to express the modern spirit, not only in great airship and airplane hangars, tall skyscrapers and huge bridges, but in small apartment houses, dwellings and small bridges as well.

Less time, less labor and less material are required to put up a steel structure than any other type of fire-resistive building. Steel not only provides a stronger, safer structure and earlier occupancy—but makes possible larger interiors for any type of building.

This is an era of steel construction . . . because no other building material is so adaptable, so durable, so thoroughly suited to present needs and future possibilities. Steel is economical, speedily erected and easily remodeled. Whatever you build, know steel!

AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC.

To further an understanding of the many advantages of structural steel in construction, the American Institute has prepared a series of non-technical pamphlets covering practically every kind of structure. Let us send you gratis pamphlet devoted to the type of building you are interested in. Your request will bring it promptly. Write today.

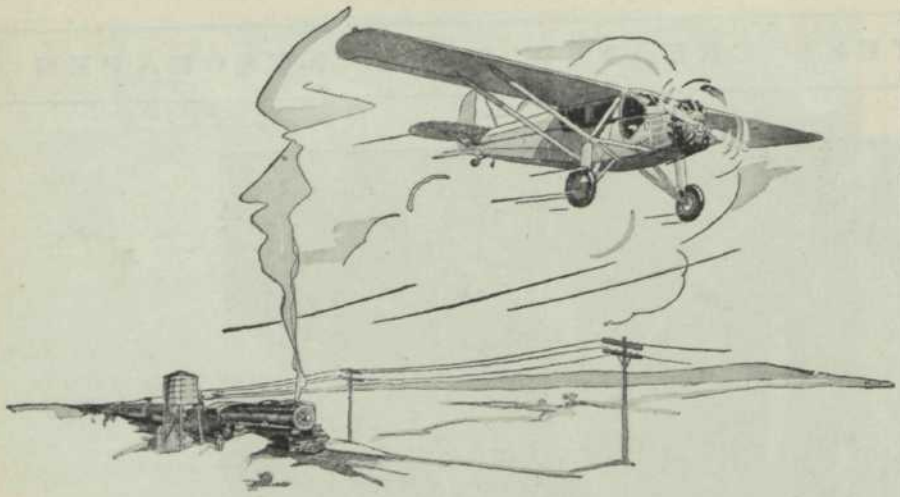
STEEL

INSURES STRENGTH

AND SECURITY

The co-operative non-profit service organization of the structural steel industry of the United States and Canada. Correspondence is invited. 200 Madison Avenue, New York City. District offices in New York, Worcester, Philadelphia, Birmingham, Cleveland, Chicago, Milwaukee, St. Louis, Topeka, Dallas and San Francisco.

When writing to AMERICAN INSTITUTE OF STEEL CONSTRUCTION, INC. *please mention Nation's Business*



He got the Business

while his competitors were still on the way



CHARLES L. MORGAN, of Fort Worth, Texas, a well-known attorney for oil and gas interests in the Southwest, is one of the many successful business men who have capitalized on air transportation.

Recently two clients appeared at his office bringing news of a "gusher" that had come in the night before in a remote section of the West Texas oil fields. Land lying close to the new well was still open to prospecting—quick, decisive action was vitally necessary to secure rights to the property.

A pilot himself, Mr. Morgan borrowed an airplane from a friend. Within 3½ hours he had visited the state land office, prepared claim papers and filed them in the proper county. First to file, his clients received the award—while Mr. Morgan, convinced of the dollars and cents value of a private plane, used his day's fee to purchase a new Ryan Brougham for himself.

Today, business men in ever-increasing number are finding Ryan airplanes valuable assets in the pursuit of their daily tasks—in getting there ahead of slow-traveling competition.

In business or pleasure Ryan airplanes—with their speed of 140 miles per hour and radius of 700 miles—*save valuable time.* Let us tell you more about Ryan transportation. Our illustrated catalog will be sent upon request.

RYAN

Builders of Lindbergh's "Spirit of St. Louis"

RYAN AIRCRAFT CORPORATION · · ROBERTSON, MISSOURI
Division of
DETROIT AIRCRAFT CORPORATION · UNION TRUST BLDG., DETROIT

When writing to RYAN AIRCRAFT CORPORATION *please mention Nation's Business*

tends to be slightly more restricted.

Cotton-goods sales heavily exceeded production in September and stocks decreased while unfilled orders increased. In woolen goods, production in August decreased while billings increased; in September production by woolen spindles decreased while that of all other makes increased.

Wheat crops large

THE WHEAT growers of this country and Canada have been described as being "out on a limb" pending a clearer view of the volume to be bought and the prices to be paid by Europe when it must buy from North and South America or Australia. In the late October break in prices a good deal of wheat flour was reported bought for export but this buying seemed to dry up as the price rallied.

There have been two features of late, however, that will bear watching. One of these, of course, is the announced intention of the Farm Board to lend money to allow of certain prices—not much different from present cash prices in leading markets—being paid for wheat. Another point is that with the progress of the season, the position of visible supplies, admittedly large, is gradually changing its relation to the supplies similarly held a year ago. That is, that while supplies are increasing, the excesses over a year ago, when larger crops were gathered in both this country and Canada, are gradually shrinking.

Thus on September 14 the combined United States and Canadian visible supply showed an excess over that held a year ago of 184,155,000 bushels. On October 26, however, the excess over a year ago was only 118,403,000 bushels, although the total visible supply was 415,361,000 bushels or 97,000,000 bushels larger than on September 14. At November 4 prices, cash wheat in three markets averaged $1.22 against $1.40 on July 29 and 94 cents on May 31. Thus prices are 12 per cent off from the top of the cereal year but 30 per cent above the low point.

At this early date it is possible to say that October mail-order sales gained 24.6 per cent over a year ago and that the gain for ten months was 28.8 per cent. Chain-store sales averaged 13.3 and 15.6 per cent respectively above October a year ago and the ten-months period. Department-store sales for October increased 3 per cent from a year ago, and for the year to date the gain is also about 3 per cent.

"Between 5000 and 6000 Checks Weekly

. . . signed at the rate of between 1500 and 1800 checks an hour"

Electric Auto-Lite Company

"About 18 months ago we installed a Todd Check Signing Machine in our Payroll Department for use in signing pay checks.

"This department issues between 5000 and 6000 pay checks weekly and after several months' experience our operators find they are able to sign these checks at the rate of between 1500 and 1800 checks per hour.

"There are periods when our Payroll Department's time is limited and this machine has made it possible for them to speed up the getting out of these pay checks.

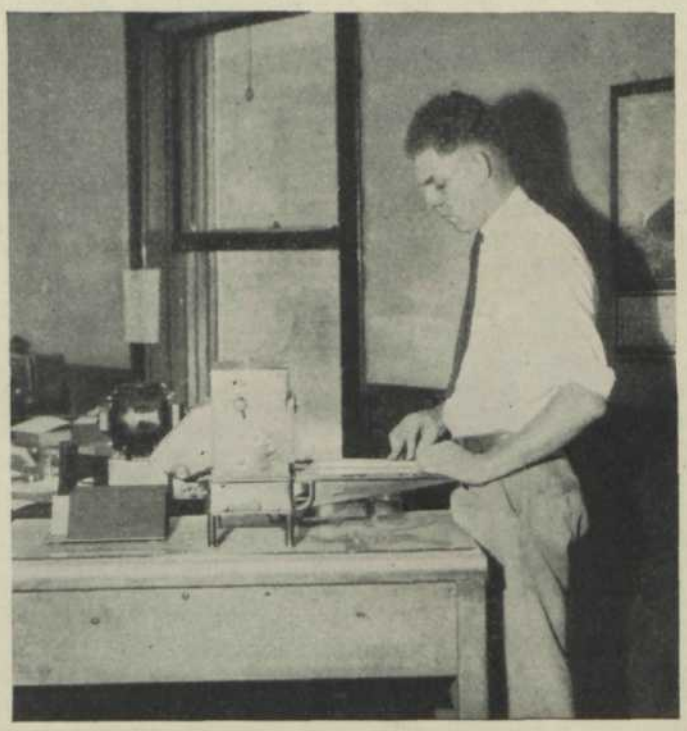
"It has been very satisfactory and we are pleased to recommend it to our business friends."

This is a letter from the Electric Auto-Lite Company of Toledo and their experience has been duplicated by many other users of the remarkable Todd Check Signer.

Todd Check Signers are of two types—a large model which signs 7500 to 9000 checks an hour, and the Single Voucher Unit (illustrated) which has an official rating of signing and stacking 1200 checks an hour. As the Electric Auto-Lite Company indicates, the capacity of this smaller check signer can be increased with experience.

These marvelous new machines relieve executives forever of the tedious, time-consuming duty of signing checks by hand. Todd Check Signers produce the most nearly non-counterfeitable signature known, and do it in a fraction of former time, in perfect safety.

Todd Check Signers have the endorsement of the greatest banks in the country, of public utilities, of state and municipal treasurers, of progressive industries and businesses everywhere. Let the Todd Office in your city demonstrate a check signer. Or send in the coupon for some very interesting literature. The Todd Company, *Protectograph Division.* (Est. 1899.) Rochester, N. Y. *Sole makers of the Protectograph, the new Super-Safety Checks and Todd Greenbac Checks.*



Signing the payroll at the Electric Auto-Lite Company, with a Single Voucher model of the Todd Check Signer.

THE TODD COMPANY, *Protectograph Division* 12-29
1130 University Ave., Rochester, N. Y.

Please send me further information about the Todd Check Signer.

Name_____

Address_____

Business_____

Todd Trade Mark

TODD SYSTEM OF CHECK PROTECTION

When writing to The Todd Company *please mention Nation's Business*

What Canadian Business Is Doing

By WILLIAM BUTTERWORTH

President, Chamber of Commerce of the United States

BUSINESS has outgrown boundaries and nationalities. No longer can the successful *entrepreneur*, snug in his own small corner, lay his finger on any set of circumstances and say, "These are my own peculiar problems. When I have solved them, my difficulties are over."

Business has become so complex that the problems of all business are the problems of the individual. The customer's problem is important to the salesman and *vice versa.*

In its relation to Canada, the United States has the dual rôle of salesman and customer. In 1928 Canada took one-fifth of all this country's exports and the United States purchased two-fifths of all Canadian exports. Here, across an unfortified frontier, flows a two-way commerce that assures cordial relations.

It is well that business men of the United States should seek a better understanding of the aims and ideals of their neighbors to the north.

The fourth annual convention of the Canadian Chamber of Commerce, recently held at Edmonton and Calgary, offered the finest possible opportunity to observe these things.

Cooperation is dominant

IT OFFERED those of us from the United States Chamber who attended an opportunity to see our Canadian friends attack their problems and to learn that their methods, their desires and aims are very much like our own.

The central theme of the Canadian meeting was "The Canadian Economic Partnership," and the feature of the sessions in which 600 delegates took part was a spirit of cooperation. J. H. Woods, of Calgary, was named president of the Chamber at the session, and W. McL. Clarke, Montreal, secretary.

Although this year's convention was only the fourth for the Canadian Chamber as a national organization, Canada is not inexperienced in chamber of commerce work. Throughout the nation are local chambers and boards of trade, 175 of which are now affiliated with the Canadian Chamber.

The constant aim of the Canadian Chamber has been to stimulate the work of these local chambers and to obtain their cooperation and counsel in the larger economic questions of national importance. Steady progress toward achieving these objectives is apparent.

Just what are these objectives? In the broadest sense they are identical with ours—the greater freedom and ease of legitimate business that all the people may benefit. Specifically, however, because of the newness of parts of the country, because of geographic difficulties, the Canadian program must differ from ours in immediate purpose.

The 17 main objectives listed at the convention included:

A motor highway across Canada; additional population and better colonization methods; development of agricultural and industrial research; institution of a national survey of natural resources; Canadian coal for Canadian people; retention of Canadian university graduates in Canada; stoppage of unwarranted diversion of water from the Great Lakes; no wasteful public expenditures; patronizing of Canadian industries and the processing of Canadian products at home; forwarding of aviation; reduction of fire waste; greater coordination of the Empire's economic activities; further reduction in income and sales taxes; conservation and development of fisheries, and extension of commercial arbitration.

Using methods much like our own, the Canadian Chamber has already made impressive headway in carrying out this program. Debate in the House of Commons last year showed a growing opinion for the national highway.

The Chamber's findings, presented to the Dominion Government, are constantly improving the position of industrial and scientific research, sales tax reduction, aviation and immigration development and the provisions for greater use of Canadian coal at home.

Last year 40 delegates gathered at Toronto to discuss better relations of agriculture with other economic interests. Here was recommended a survey of distribution costs, greater support for Canadian agricultural colleges, increased use of farm machinery.

In the interests of export trade, a special good-will mission visited the British West Indies, and a special joint conference was called at Ottawa to consider practical methods for developing the West Indies fruit and vegetable trade; and to establish closer relations with chambers of commerce in the Empire.

An industrial survey has been begun and the Chamber will cooperate with the government in the work.

On the side of industrial development, the Chamber and its member organizations have been no less active. The Alberta Development Board, Southern Section, has for two years been active in an effort toward land settlement, industrial expansion, and tourist traffic.

Closer business relations

PERHAPS the most important forward step taken at the recent session was passage of a resolution authorizing appointment of a committee of nine to call a conference of commercial and industrial leaders from all parts of the Empire.

Transportation, especially aerial transportation, agriculture, commercial arbitration and other problems were also considered with vigor and enthusiasm.

Here is business united, ambitious and eager to meet its difficulties. This ability to rise to obstacles gives added importance for American industry to these remarks of William Birks, retiring head of the Canadian Chamber:

"The chairman of the United States tariff commission tells us that country's tariff is 100 per cent American; that it gave not an iota of consideration to anything outside its gates. The Right Honorable J. H. Thomas says Canada buys from the States $4 in goods for every $1 we buy from the motherland.

"It is not for us to talk politics but shall we not ask our government to reduce this discrepancy. Doubtless we cannot cut the $4 to $1, but shall we say reduce it to $2 by free trade, by freer trade, by fair trade, by protection, by safeguarding?"

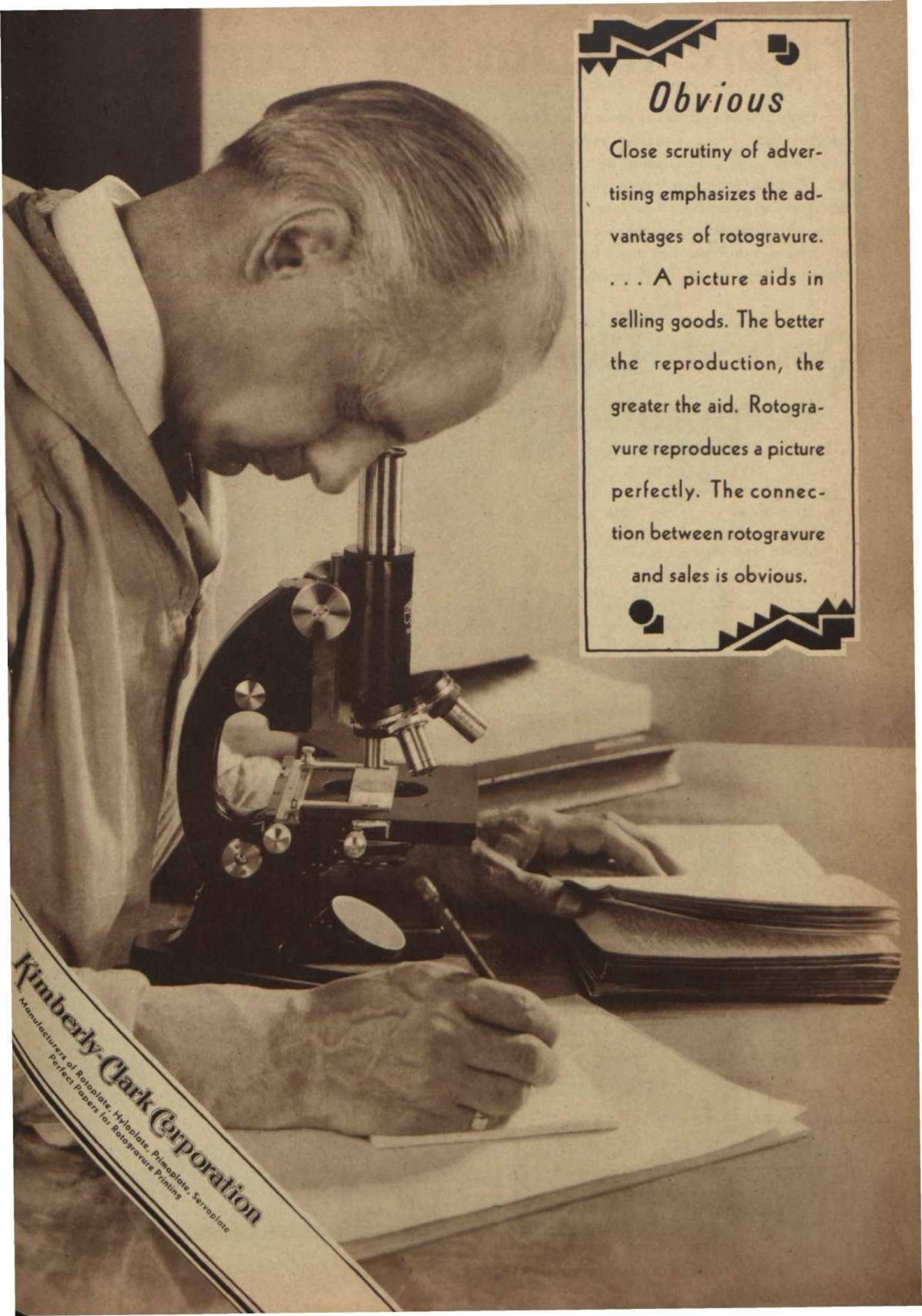

Obvious
Close scrutiny of advertising emphasizes the advantages of rotogravure. . . . A picture aids in selling goods. The better the reproduction, the greater the aid. Rotogravure reproduces a picture perfectly. The connection between rotogravure and sales is obvious.
Kimberly-Clark Corporation
Manufacturers of Rotoplate, Hyloplate, Primoplate, Servoplate
Perfect Papers for Rotogravure Printing

Figure It Out for Yourself

In a picture, people see clearly at once an entire thing that they could visualize vaguely only piecemeal through a description of it, detail by detail. Pictures tell complete stories, quickly. ¶ Rotogravure reproduces pictures perfectly, photographs particularly. Rotogravure comes most nearly placing your product right before your prospect. ¶ Papers made by Kimberly-Clark are suited perfectly to every rotogravure use. They are used so extensively by newspapers and by printers of commercial literature that they are the Standards of Rotogravure Printing. ¶ Figure out the place of rotogravure in your advertising program. If we can help, we will do so gladly through the Rotogravure Development Dept., Kimberly-Clark Corporation, 208 S. La Salle St., Chicago.

Kimberly-Clark Corporation

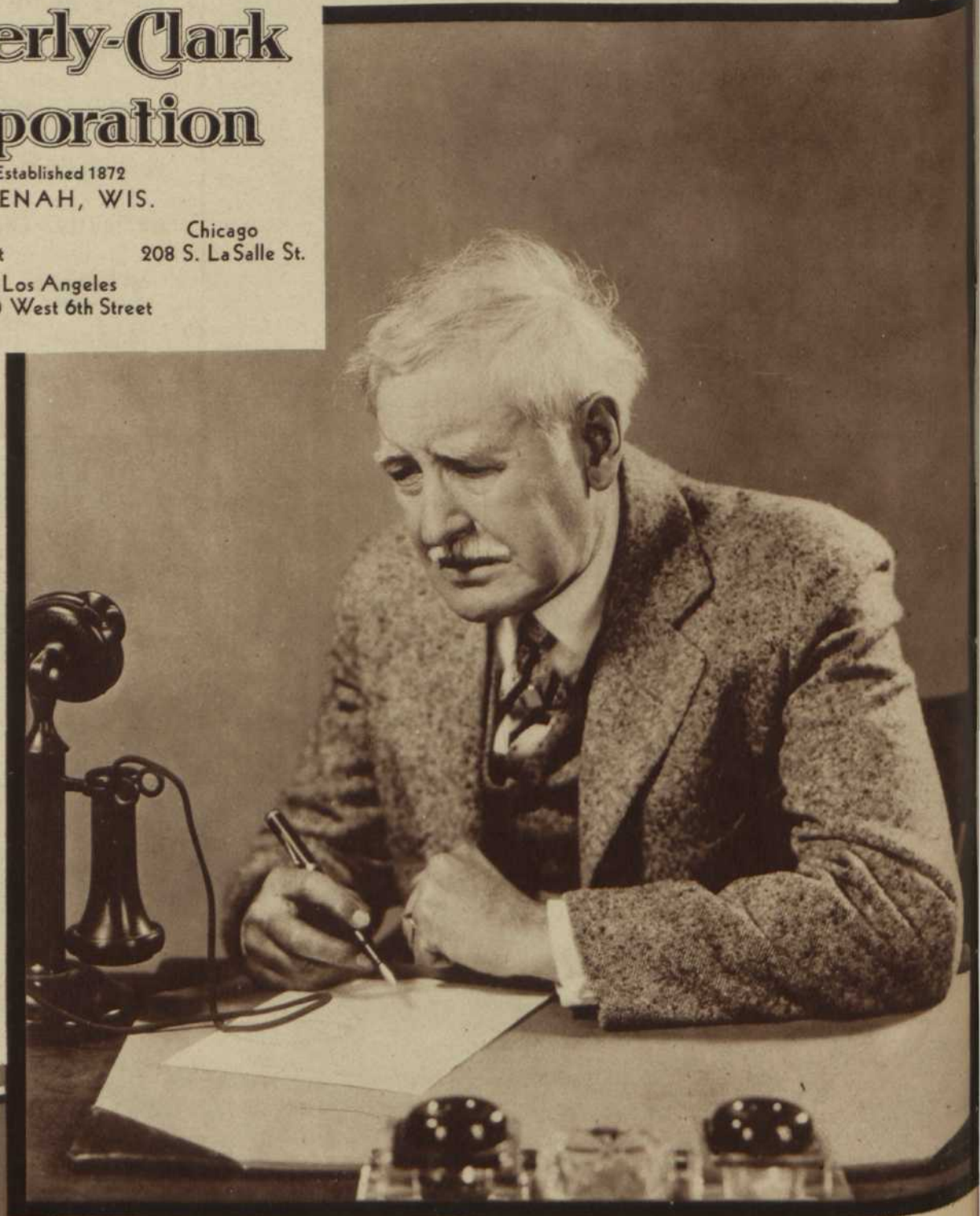
Established 1872

NEENAH, WIS.

New York
122 East 42nd Street

Chicago
208 S. LaSalle St.

Los Angeles
510 West 6th Street



Factors Which Make a Merger Sound

(Continued from page 27)

of the most familiar is the horizontal combination composed of companies manufacturing the same product —as matches or automobiles. Every such combination has not succeeded. It must always be remembered that management, fashion and price are even greater factors in the success of a business than the mere fact of combination, and that mere acquisitive ability does not necessarily imply administrative and executive qualities. The fact remains that horizontal combinations have been popular in the business world, and are likely to remain a fashion for some time.

The vertical type is formed by a number of industries of such a sort that the finished product of one becomes the raw material of another. At present the Ford Motor Company probably represents one of the most complete examples of the vertical combination in this country. The Anaconda Copper Company is another example that might be cited and several oil companies are almost completely integrated.

Partial verticalization is exemplified in such companies as the American Telephone & Telegraph Company with its subsidiaries; Sears, Roebuck & Company with its manufacturing plants, and some of the textile and food companies.

An older type of combination

BY no means new is the allied industry combination, a combination making articles of a similar nature, or articles which can be sold to the same market International Business Machines Corporation, formerly the Computating Tabulating-Recording Company, represents one of the oldest and most successful combinations of this type.

The chain type of combination is as old as the branch office type of combination, which permits the extension over wide territory of principles and methods that have proved successful in one locality. Most recent and spectacular in this field is the chain-store development. Besides the store chains, there are also chains of banks, bakeries, hotels, barber shops, gasoline stations, theaters, and taxicab concerns.

Another type of combination known as the seasonal, includes industries whose peak loads occur at different seasons. It is common and represents





"Listen to this"----

"LISTEN TO THIS," said Dan over the lunch box. "When my street car got close to the tunnel, I spotted two kids on the trestle of the steam railroad watching the traffic below. All of a sudden along comes the steam train swingin' around the curve at a fast clip, and the young 'uns couldn't see it. Yell! yes, plenty and ringin' the gong like the devil, but nary a bit of good did it do until —well they started to run. One got clear but Guy tripped on somethin' . . . fell . . . *sprawled on the tracks.* The locomotive hit him . . . knocked him between the rails. The whole Works rolls over him. Just as the third coach was going over, Guy sort of raised up and whack! something hit his head. We all thinks it's the end. I runs over and grabs him. Took his sweater off and puts it under his head. His hip was dislocated so I sets it again. The kid wasn't breathing. I rolled him over on his face and gave him prone-pressure treatment. Didn't have much luck at first but finally he opened his eyes. As soon as I stopped he went cold, so I began again as if he was my own kid. Pretty soon he came to—this time to stay."

— A Motorman's Story

This is one incident from many in the files of Stone & Webster Companies. Stone & Webster men are trained in First Aid. Their prompt and level-headed action has saved many lives.

The Coffin Medal, the highest award in the electrical industry, has been won four times in eight years by companies under Stone & Webster executive management.

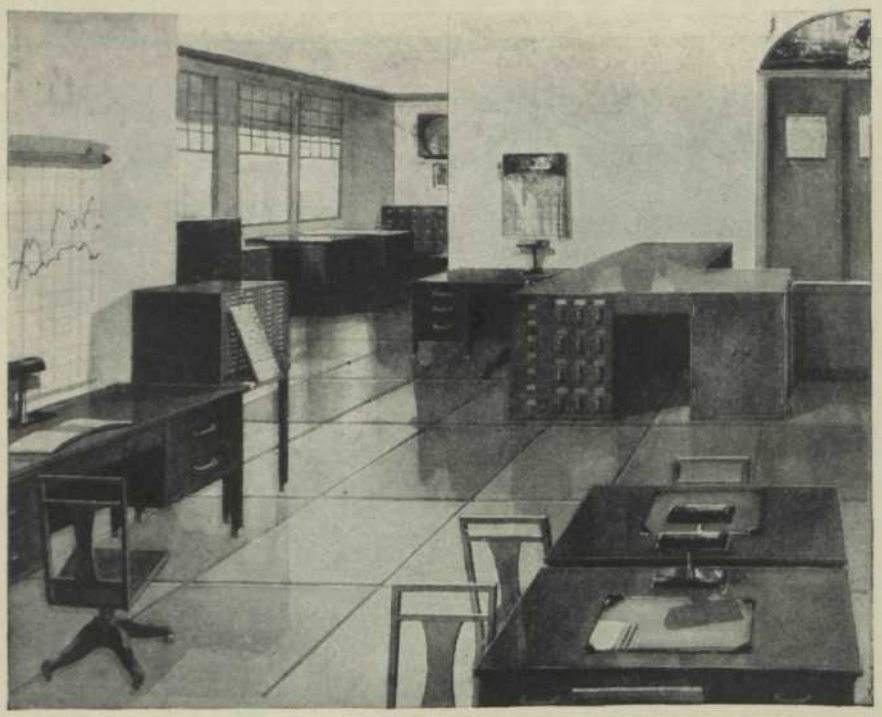
The Insull Medal has, seven times, been awarded to Stone & Webster men; the McCarter Medal, three times; the President's Medal of the National Safety Council twice; the Liberty Mutual Insurance Company Medal, once. Two companies have won the Anthony N. Brady Memorial Medal for Outstanding Accident Prevention and Health Work on Electric Railways. Another is local representative of the National Red Cross.

STONE & WEBSTER

INCORPORATED

OPERATE FINANCE BUILD

When writing to STONE & WEBSTER INCORPORATED *please mention Nation's Business*



EXTRA ENERGY for productive work

The result of business hours spent in a comfortable office

HALF your waking time spent at "the office." Do these business hours play fair with you? Not if poor equipment is stealing energy that productive work or relaxation should have.

Let modern Art Metal equipment insure pleasant surroundings for your office. Let its planned efficiency speed routine, eliminate petty irritations and better the morale of your entire personnel.

Whatever your needs, Art Metal can fill them. Desks for executives or staff; files for every possible requirement; fire safes of permanent, pre-tested protection; shelving; any office piece . . . designed by engineers with forty years' experience . . . executed by master craftsmen and reasonably priced. Best of all, first cost is last. Steel does not splinter, break or warp—and steel reduces fire hazard.

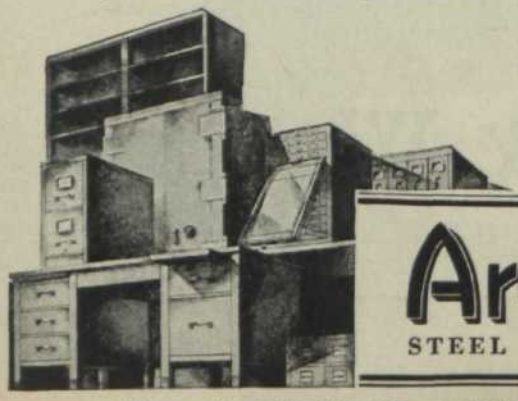
See this attractive furniture and equipment finished in natural wood grains or rich olive green. See the wide variety of price and line . . . the most diversified line in the world. On display locally in over 500 cities.

Write for beautiful color booklet of office interiors . . . free

"Equipping the Modern Office" is illustrated with paintings by Lurelle Van Arsdale Guild, widely known New York decorator. They suggest a few of the pleasing and practical office interiors that may be achieved through the use of Art Metal equipment. We shall be glad to send you a copy along with any of the catalogs listed below. Just write, mentioning the ones you wish.

Art Metal Construction Co., Jamestown, N. Y.

☐ Desks ☐ Upright Unit Files
☐ Plan Files ☐ Counter Height Files
☐ Fire Safes ☐ Horizontal Sectional Files
☐ Shelving ☐ Postindex Visible Files



Art Metal
STEEL OFFICE EQUIPMENT

When writing to Art Metal Construction Co. *please mention Nation's Business*

an attempt to utilize labor and equipment throughout the year. For examples we may turn to combinations of coal and ice dealers, coal and brick companies, coal and builders' supply companies, oyster and ice cream companies and the like.

We have recently heard a great deal about the German Cartels and what they are doing to rehabilitate German industry. They are nothing new. We had them back in the 'eighties. Such types as "blind pools" and "gentlemen's agreements" have disappeared violently or quietly, depending upon circumstances.

The "trade condition" cartel and the "standardization" cartel have survived in the form of trade associations of which there are now more than 12,000 in this country.

Cartels cover wide range

THE "patent" cartel, in which certain companies are licensed to manufacture under patents held by others is a current type. Also we have selling and purchasing cartels. It is clear enough that a cartel is based upon a contractual relation undertaken for mutual benefits by interests with similar aims. It ranges from the trade associations whose members agree to pay annual dues, to associations which (in Germany) fix prices and establish production quotas with penalties for violation.

In this country the Trade Association, encouraged by the Government, has done much to stabilize industry. Uniform methods of accounting and uniform trade discounts have been established. Standardization, simplification, and elimination of waste have been encouraged. Group advertising has been undertaken. Research has been financed and encouraged. Information on production, sales, and technical methods has been disseminated.

Still another type of combination, known as the "common interest" type was at one time well organized in this country by means of what was known as "interlocking directorates." These were discouraged under the Clayton Act in 1914. At the same time there is no reason why men who can bring business to a company should not be elected to its board of directors.

There is no law to prevent an individual, a banking group, or an investment trust from owning stock in competing companies. There is nothing to prevent such interests conferring in regard to matters of mutual concern and advising with executives, provided no statute is violated.

The so-called "local" type of com-



SLIDE!

THE smooth-sliding, easy-running carriage of the Marchant All-Electric Calculator prevents strain on your nerves... and on the machine. Greater speed, with less effort.

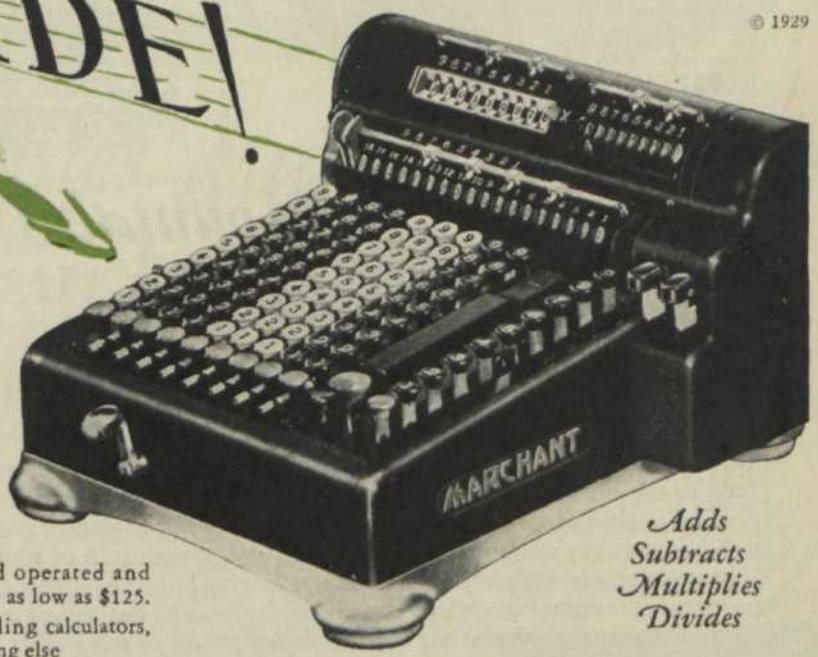
This natural, easy action of the carriage is only one of the five vitally important and *exclusive* improvements that put the Marchant years in advance of all other calculators.

Investigate the Marchant. Take the first step towards placing your figuring on the most efficient basis... speeding up the work... relieving the operator of unnecessary mental and physical strain... and increasing your profits.

Mail the coupon for free booklet and full information. If desired we will arrange for a thorough trial on your own work under your office conditions. Anyone can operate the Marchant after a few minutes practice.

Sales and Service Offices the World Over

© 1929



Electric, hand operated and *portable* models as low as $125.
16 years building calculators, nothing else

Adds
Subtracts
Multiplies
Divides

MARCHANT *ALL-ELECTRIC Calculator*

5 *exclusive improvements that make all other calculators obsolete*

1. ***Straight-line visible check*** on all figures. All factors and the result right before your eyes. Increases accuracy and speed. Eliminates checking back. *No other calculator has this feature.*

2. ***Instantaneous electric clearance.*** Press a button and the machine is cleared of all figures...instantaneously, positively. Speeds up calculations, saves energy, prevents partial clearances from injuring the mechanism. *No other calculator has this feature.*

3. ***Smooth-sliding carriage***... no humpy-bumpy hurdling... moves quietly over a straight-line surface... gives greater speed, less noise, less fatigue to operator, less wear and tear on the machine. *No other American-made calculator has this feature.*

4. ***Automatic stop control*** on *all* calculations including addition and subtraction. The electric motor stops automatically the instant the operation is performed, preventing unintentional extra calculations. *No other calculator has this feature.*

5. ***Compactness***... Compact keyboard and closely spaced dials make for speed, and machine occupies minimum desk space. *No other electric calculator has this feature.*

Free



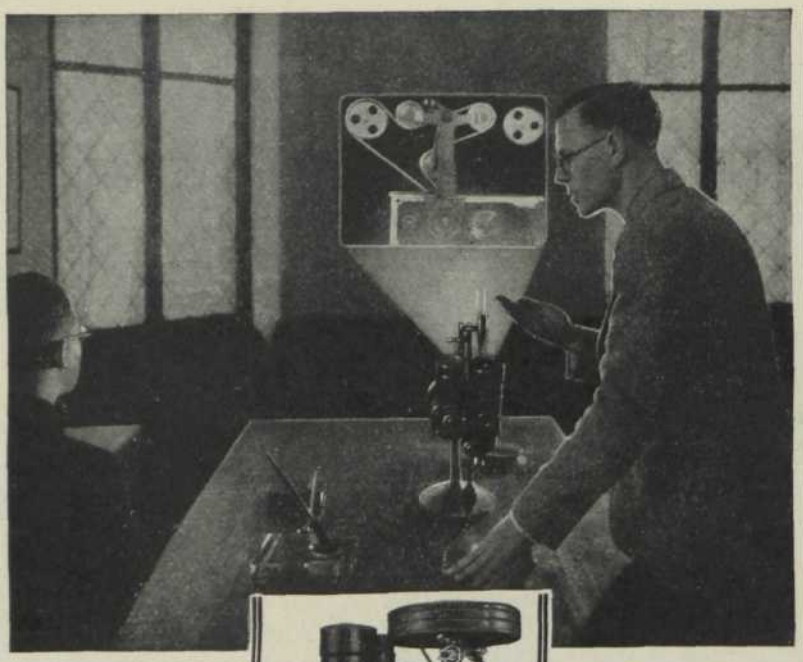
MARCHANT CALCULATING MACHINE COMPANY, Dept. 62, Oakland, California
Please send me at once free literature and full information about
☐ Marchant All-Electric Calculator
☐ $125 Marchant Portable Calculator

Name _____

Firm _____

Address _____

City and State _____



Filmo Continuous Projector

Filmo 57-X Continuous Projection Attachment (at right) installed on regular Filmo Projector. Fully automatic. Special reels accommodate up to 150 feet of 16 mm. non-inflammable film equal to 375 feet of standard 35 mm. film.



Filmo 57-C Business Projector

(Above) The ideal projector for business use. 250-watt 5-ampere lamp, 45-50 strong condenser, variable voltage resistance and voltmeter, providing maximum illumination for showing sales films in offices, lodges, convention halls, etc. $240 with case. Other models $190 and up.

Moving the Mountains to Mahomet with
FILMO BUSINESS PROJECTOR

Mahomet had to be content with going to the mountain when it ignored his command to come to him. But Filmo hadn't been invented then. Today, your prospects rightly expect you to "bring the mountain" along if you want them to see it and buy it. And Filmo Business Projector, the finest moving picture projection device to be had, can pick up your entire factory and set it down on the prospect's desk if necessary . . . for clear forceful illustration of your product, its operation, its manufacture.

Filmo Business Projector is light in weight, easy to carry and simple to operate. Its powerful illumination, absence of flicker, and its precise and dependable mechanism are a result of Bell & Howell's 22 years of leadership in the manufacture of professional moving picture equipment. *Its very reputation as the best projector in the field reflects prestige on your product.*

Models may be had equipped as a self-contained unit with miniature transparent screen—ready to set on a desk and turn on the switch. Other models provide for continuous projection of your sales film in store windows or other displays.

Ask any Filmo dealer for a complete demonstration or write to us today for literature.

BELL & HOWELL
Filmo

BELL & HOWELL COMPANY, DEPT. L, 1812 LARCHMONT AVE., CHICAGO, ILL.
NEW YORK · HOLLYWOOD · LONDON · (B. & H. CO. LTD.) · ESTABLISHED 1907

When writing to BELL & HOWELL COMPANY *please mention Nation's Business*

bination is rather rare owing to the lack of any well defined economic reason for existence in most cases. A combination of this type recently formed in the West included a sewing-machine company, a piano company, and certain furniture plants located in one town.

One once formed in an Alaskan city combined nearly every business house in the locality. During the war, industries united in various cities to find, train, and deal with labor.

A prerequisite to success

THE advantages commonly anticipated from combination, as I have tried to point out, are inescapably qualified by the variability of the human equations involved.

A blind faith in the principle that "in union there is strength" is no guarantee against disaster.

The combination movement is by no means confined to the industrial field. It is taking place in the public-utility field, the retail field, the wholesale field. It is taking place in the banking field, the investment-trust field, and more and more its advantages are being extolled with an agricultural accent.

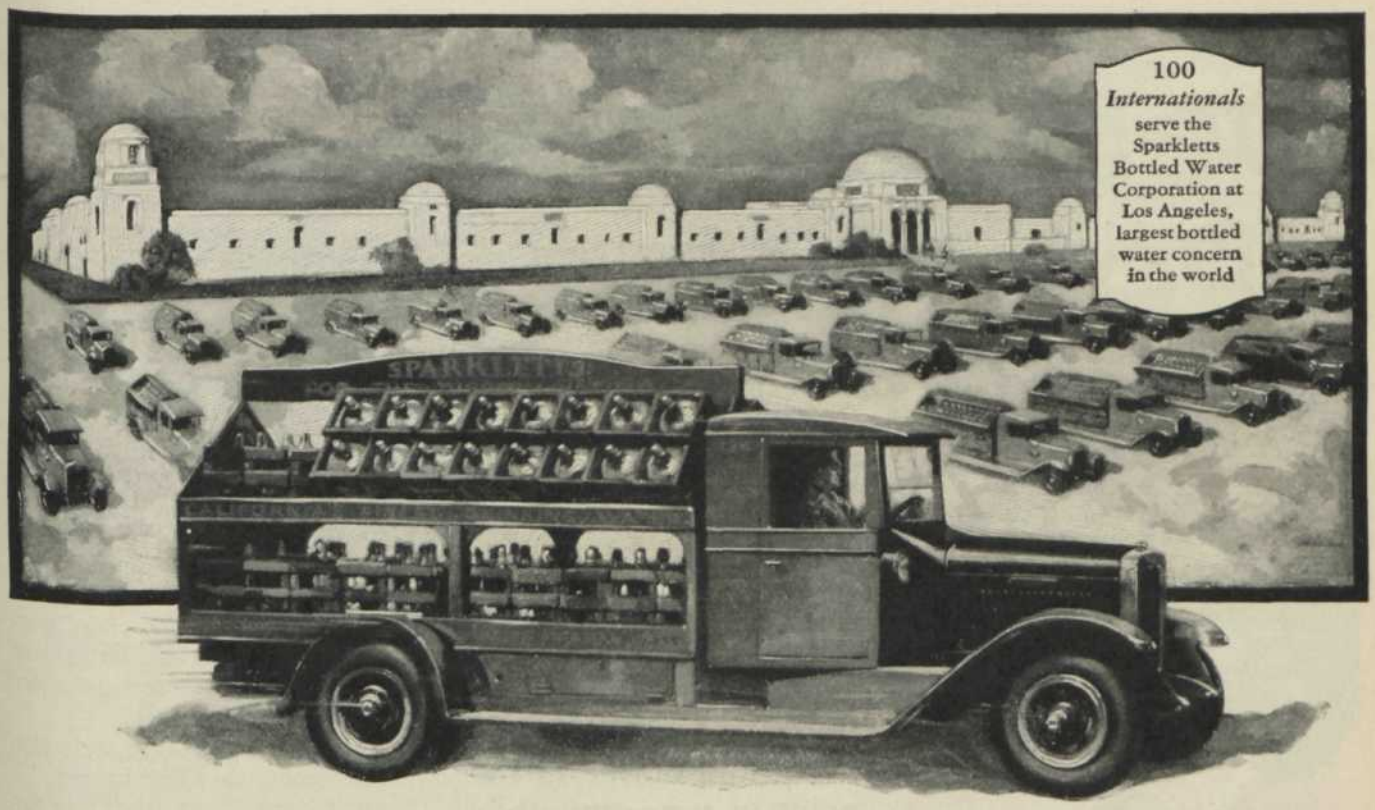
It is a natural movement for it is the logical outgrowth of a civilization now so accelerated in its capacity for change that we find new ways of living and of doing as regularly as we read the daily newspaper.

The implications of this combination consciousness for the worker and the consumer are many and various. Some heads may fall in the process of combination, but would we deny ourselves an omelet because eggs must be broken to make it?

Individual displacements are a price of progress, and I cannot believe that really economical combinations will be held antisocial in respect of their employment policies. I have an abiding regard for the quality of our industrial leadership in its intelligent expression of the spirit of fair play.

The public is still the judge

IT may be true that some of our larger concerns are operating at higher costs than our smaller ones, but the fact in itself should be a spur to the "little fellow" who is thus able to give his customers the benefit of his own resourceful efforts to keep prices down and volume up. Public opinion is still sovereign in determining the fate of business, big and little. Every man



"*The Breakables and Perishables* Ride Safe in Internationals"

International Speed Truck owners praise the *easy-riding* qualities of their trucks. They *know*—from their daily experience in hauling bottled beverages, glassware, china, fine furniture, artware, bric-a-brac, eggs, dairy products, poultry, live stock, and the like.

The *Sparkletts Company* of Los Angeles is immensely proud of its efficient army of Internationals. The *Washington Cooperative Egg & Poultry Association* of Seattle, operating the Northwest's largest fleet of trucks —all Internationals—has boosted Internationals for years. The *Bowman Dairy Company* of Chicago, with a fleet of 162; the *Blue Valley Creameries*, with 170 Internationals ranging over seven states; and the *Nehi Bottlers* with their many fleets in the South—these, for example, will tell you that Internationals tread easy with their loads.

REAR AUXILIARY SPRINGS have a lot to do with International's reputation for easy riding. This original feature is shown here at the right. The auxiliary springs are always on guard, waiting to protect your load, your driver, and your truck. They will add months and mileage to the life of your Internationals.

Ask the nearest branch or dealer to demonstrate the model you need. There are now 174 Company-owned International branches in the United States and Canada.

This is the
AUXILIARY SPRING

In Internationals the MAIN springs are designed to deal gently with *light* loads, *empty* trucks, and *smooth* roads. This AUXILIARY spring comes into play to absorb the *heavier* impacts of road and load.

MAIN SPRING



All Models in the
International Line
are protected by REAR AUXILIARY SPRINGS. *Special Delivery, ¾-ton; Six-Speed Special, 1-ton; Speed Trucks, 1¼, 1½, and 2-ton; Heavy-Duty Trucks, chain and double-reduction drive, 2½, 3½ and 5-ton.*

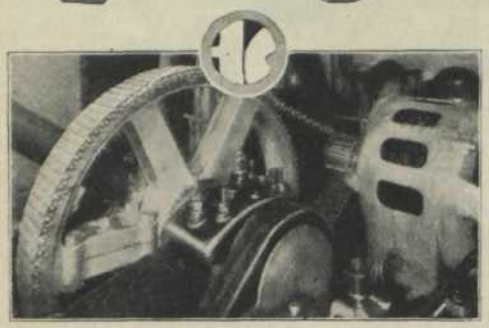
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When buying an International Truck *please mention Nation's Business to the dealer*

Dependable Power with MORSE CHAIN DRIVES



MORSE SILENT CHAINS as installed in the refrigeration plant of The Arena Gardens, Montreal, Canada

For dependability in power transmission, your plant should have Morse Silent Chain Drives. They keep the wheels of industry turning year in and year out, with a minimum of repair and upkeep expense. They transfer your power from the prime mover to the point of use—smoothly, silently, efficiently. The foremost engineers, and the greatest industries of the country choose them because of their proven advantages over any other form of power drive. And once installed in your plant, they will make money for you through lowered overhead, efficient transmission of power, reduced manufacturing costs, and better work done by machines that run at their best.

Morse engineers are always waiting to serve you. A complete file of data on power transmission that is of interest to every business man, every factory maintenance man, and every engineer will be sent you on request. Write for it.

Morse Engineers are always available at

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Kansas City, Mo. Louisville, Ky.
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Newark, N. J. New York, N. Y.
New Orleans, La.
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MORSE CHAIN CO.
ITHACA, N. Y.

MORSE SILENT CHAIN DRIVES

Be sure to see the Morse Chain Company exhibit at the Power Show, New York City, December 2nd to 7th.

When writing to MORSE CHAIN COMPANY *please mention Nation's Business*

worthy to direct a great enterprise recognizes that power. As Matthew Sloan of the Brooklyn Edison Company puts it:

"It is perhaps natural that these combinations should arouse comment for they have come about rapidly and they are fairly sensational in size and scope. The implication, however, that their consequences should be evil is not borne out by results so far ascertained, or by conditions and circumstances in the situation.

"Taking them on the lowest basis, power and light companies are concerns to make money. They have a very large investment. They can make money, not by limiting their product—electrical service—but by selling it. They can sell it only by making it commend itself to customers as to quality, price and usefulness. Their constant effort then must be to make service better and prices lower so that they may sell more service.

"So long as they do this, their size is no detriment to the public interest."

Again and again I am asked how far this trend toward combination will go. I do not know.

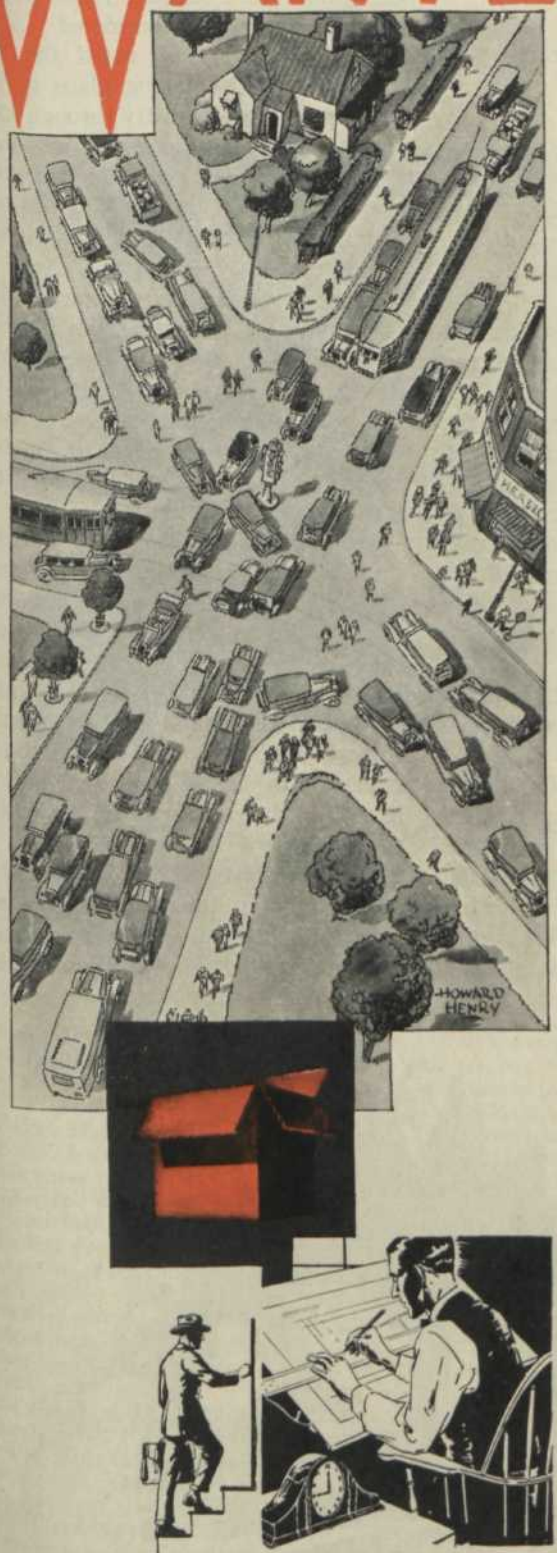
What lies before us?

CERTAIN banking friends of mine feel that the whole movement is leading toward some sort of economic socialism under which all industry will be owned by those engaged in production, sales and finance, whether they be executives or the rank and file. Common stocks of our great industries have been widely distributed and the man who owns a share of stock is entitled to a voice in the conduct of the business.

The opinion has been expressed that eventually the country's business and politics will be more definitely and scientifically controlled by those engaged in the operation of industry. If this is true, perhaps "economic socialism" is as good a term as any to describe what is before us.

But this I do know. We have in this country a resource of business statesmanship adequate to the most searching tests of leadership. I have no patience with the pessimism that sees the creators of American business overwhelmed by the enormity of the structures they have created. This age has its decisive leaven of business genius no less renowned than the past. But more, it has new wings for the expression of that genius—wings which outsoar the vaulting dreams of the departed Titans who managed so ably to give us the brightest place in the economic sun.

WANTED: Experts only to solve modern traffic problems



IN the leisurely horse and buggy days the only important traffic rule was: "Keep to the right." Today, "Keep Moving!" is paramount. Traffic, with its complexity and congestion, has grown so great that only men specially trained in that field can attempt to solve its difficult problems. Without expert direction hopeless tangles, accidents and business loss are bound to result.

For packaging problems only the PACKAGE ENGINEER

IN the old hammer and nails period the making of a shipping container was a simple matter. A wooden box of the required size and strength answered the purpose. Business was slower, labor and material costs lower, profit margins wider.

Today, keen competition, increased volume and greater transportation hazards demand a better shipping container at lower cost. Corrugated fibre shipping boxes meet this demand with their greater safety, convenience and economy.

Yet corrugated fibre boxes must be expertly designed to completely meet the individual user's requirements. Shape, shipping costs, packing room labor costs, storage limitations, merchandising requirements, strength, protection, display value —all these factors are considered by H&D Package Engineers.

The staff of 50 has a combined experience of many centuries acquired in the study of thousands of diversified products. They have saved thousands of dollars for other shippers. Their services are at your disposal without charge or obligation.

Mail the coupon for a copy of the latest H&D booklet on scientific packaging in your field.

THE HINDE & DAUCH PAPER COMPANY
304 Decatur Street Sandusky, Ohio

HINDE & DAUCH *corrugated fibre* SHIPPING BOXES

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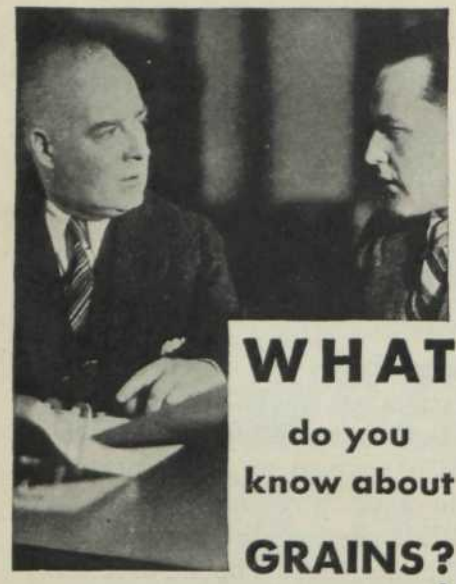
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We are interested in packing



WHAT do you know about GRAINS?

A GREAT future awaits many millers, manufacturers of cereal breakfast foods, makers of stock feeds and others in similar lines in this rich agricultural and industrial Piedmont Carolinas.

For here are abundant cereal crops. Oats and wheat (as well as corn and barley) are produced in every Piedmont Carolinas county. But that part not used on farms finds its way to market in the "raw" state.

Each year $325,000,000 worth of manufactured foods and feed stuffs are *imported* into the Carolinas. This useless ebb and flow of grain crops will be stopped only when Carolina mills grind and mix Carolina grains.

The large industrial population, employed at wages that insure good living, is a healthy market for home-produced flour, meal, and cereal goods.

The increasing flocks of poultry, herds of dairy cattle, hogs and other stock are an equally valuable market for by-products that cannot be turned into human food.

Facts are presented in this book — "Piedmont Carolinas, Where Wealth Awaits You." Send for it. Address Industrial Dept., Room 133, Mercantile Building, Charlotte, N.C. Write.





DUKE POWER COMPANY

SOUTHERN PUBLIC UTILITIES COMPANY AND OTHER ALLIED INTERESTS

When writing please mention Nation's Business

Things Our Merger Has To Face

(Continued from page 19)

often will carry a man or a business along for a time. After that comes gradual decline and decay.

Retailing is following industry

IN OTHER fields, large combinations of capital have stopped this disintegration because they bring in overlapping generations providing a constant source of management supply. If retailing is to seek public financial support it must follow suit. This is more imperative today than ever before in financial history, with the widespread and growing interest in common stock ownership.

A small and local group may be exceedingly able, but it cannot offer the same promise of future growth that is to be expected of a nation-wide collection of ability providing a reservoir of management.

A sound, progressive parent organization will discover and bring into national recognition and opportunity many capable men who have remained hidden behind moderate successes in independent stores. This was one of the most influential factors in bringing into the Hahn group the owners of stores who had been and still continue to be highly successful in their own cities. The stores in the group were selected from several hundred which were considered.

All these men had noted the tremendous changes taking place in the department-store industry through mergers and the development of merchandising on a national scale, making closer association between this business and the investment banking fraternity inevitable.

Department stores have shown ability to maintain stable earnings over a period of years and, through the present movement toward consolidations, to open up new avenues of expansion and reduced costs. As a group the department-store issues have now become an important factor in stock-market trading.

From the standpoint of the industry itself, a close linking up with the sources of investment activity also has been a logical and necessary step. The general trend toward mergers and the steady growth of individual units have made more and more capital necessary. In this respect, the department-store industry is passing through a phase that may be likened to the early days of automobile development.

The demand for consolidation is in the air today in American industry, and recently, in much that is being said and written about it, there has been a strong



Executive thought in manufacture and certain retailing fields flows in but one direction—down

"SEND COAL QUICK— WE'RE FREEZING!"





Telephone Typewriters connect the central office of the Consumers Company, Chicago, with 14 widely-scattered yards

HOW THE TELEPHONE TYPEWRITER PROTECTS THE HEALTH AND COMFORT OF CHICAGOANS BY SPEEDING UP THE DELIVERY OF FUEL

When cold waves sweep down on Chicago from far-off Medicine Hat, Teletype ... the Telephone Typewriter . . . plays an important part in alleviating distress.

For with its aid the Consumers Company, the city's largest retail coal concern, sends *typewritten* orders from its central office to 14 widely-distributed yards in less time than it would take to 'phone them!

Orders received by telephone at the central office are immediately handed to the Teletype operators. A few minutes later they reach the proper yards in typewritten form. No matter how peculiar the name or address, it is legibly and accurately recorded.

As the receiving machines typewrite automatically, it is unnecessary to wait for the yards to answer before messages can be sent. Yard clerks, therefore, are able to devote their entire time to filling and dispatching orders.

Teletype ... the Telephone Typewriter . . . is the only device that sends typewritten messages by wire. Depressing a key on the sending machine causes both the sending and receiving machines to print that letter or figure . . . instantly! As the sender can see what is being printed by the receiving machine, errors in transmission are virtually impossible.

By means of this remarkable device a typist in your office can send typewritten instructions to any part of your plant, or to far-removed branches, warehouses or factories, at the rate of 60 words per minute. Machines can be used in either direction, making it possible to send a message and receive a reply immediately.

A distinct advantage of Teletype is that it provides a typewritten record for filing at both ends. Thus it combines the speed and convenience of the telephone with the authority and permanency of the printed word.

Telephone Typewriter service is not expensive and will pay for itself repeatedly by eliminating errors, doing away with messengers and speeding up the flow of business. Mail coupon for further details.

REPRESENTATIVE USERS

American Can Company, Chicago
Boeing, Universal and N. A. T. air lines
Ford Motor Company, Detroit
New York Central, Pennsylvania, Southern Pacific and other railroads
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Radio Corporation of America, New York
Roosevelt Hotel, New York
Bank of Italy, Los Angeles
American Radiator Company, Chicago
General Electric Company, New York and Chicago
Brooklyn Union Gas Company, Brooklyn
Standard Oil Company, Chicago
Crane Company, Chicago
Bonbright & Company, New York
Armour & Company, Chicago
Consumers Company, Chicago

TELETYPE

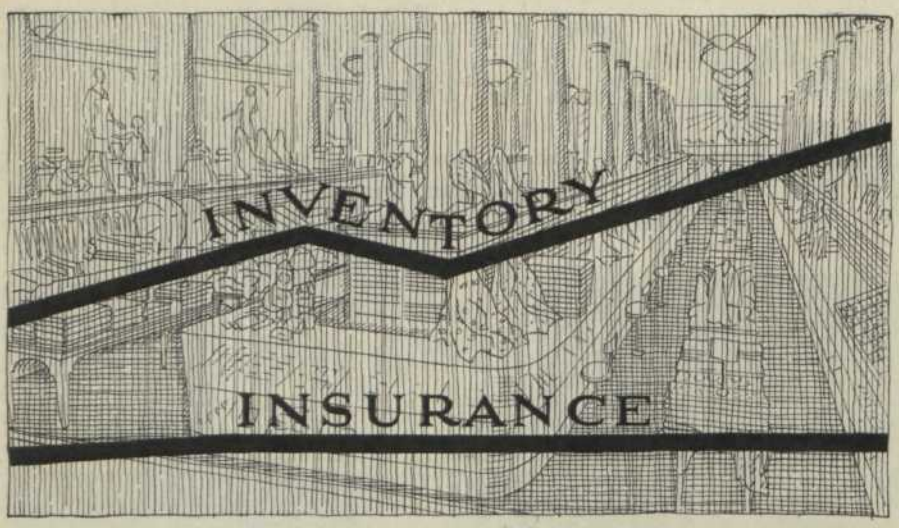
THE TELEPHONE TYPEWRITER

MAIL FOR FURTHER FACTS

For full information concerning the Telephone Typewriter and its cost, sign this coupon, pin it to your letterhead and mail to the TELETYPE CORPORATION, 1400 Wrightwood Ave., Chicago.

Name _____

Position _____ NB 12-29



Inventory may prove your insurance wrong

The value of your property determines the amount of insurance you should carry.

Frequently, additions to buildings and important increases in material have been made without revising insurance coverage. Result, in case of loss, the owner is not fully protected —cannot be fully reimbursed.

No one wants to pay premiums on over-insurance. Conversely, no honest man will try to collect insurance on property he does not own.

And the man who "wants a fire" must not be allowed to collect.

It is the property owner's duty to see that he has the *correct* amount of insurance. And it is a simple matter to meet this problem.

Whenever you take inventory—have someone check your policies against inventory values. Then revise your policies accordingly, with due regard for actual *value. That* is what insurance protects.

To assist you there is an Agricultural agent in your community who will be glad to inspect your policies, without charge, without obligation.

You may rely on his judgement. Or if some particularly unusual question arises, a special consultant from the company will call at your convenience. Selected for their integrity and experience, these men will hold your statements in strictest confidence . . . and they will advise you well.

You can obtain Agricultural Policies for all coverages such as:

Fire : Parcel Post
Automobile · Marine
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Transit · Earthquake
Tourists' Baggage
Explosion and Riot
Aircraft Damage

Agricultural Insurance Company of Watertown, N. Y.

When writing to Agricultural Insurance Company *please mention Nation's Business*

note of caution and of warning. This is good advice. It is unquestionably true that there is no magic in mergers alone. The management, as with a corner grocery, must be big enough to visualize its opportunities.

But consolidations dictated by economic necessity have a way of drawing to them men with the skill and vision required for the work they are to do. With that skill, based on specific information, it is my opinion that retail consolidations will solve many of the most important problems facing us today.

Economies and mergers

THE post-war period of expansion produced high operating costs and after any such period there comes the need of reducing expenses. Then unfailingly there is a movement toward amalgamation. Independent concerns begin to see the advantages of pooling efforts and resources and the sharing expenses.

All stores cannot go on year after year beating their best previous records. Alert merchants know that many will be disappointed and that the store which goes ahead will be the one with the most effective buying arrangements, the strongest sales promotion, the best control of purchases to proportion its inventory to its sales, and the most conservative expense account with, of course, the soundest financial backing.

While many department stores will continue independently with success, I believe it is going to be more difficult for them to grow in the face of future competition. The problem will be more difficult in the department-store field, in my opinion, than in such specialized and limited areas of merchandising as the chain stores cover.

Undoubtedly consolidations in the retail field will develop many problems in management which are not now foreseen. Many now exist which may be solved only by detailed study and analysis. Meantime, the most encouraging fact about distribution today is the amount of attention business men are giving it. When a demand becomes nation-wide in this country we have a way of finding means of supplying it, and I believe we may expect in the next decade to see as much progress in the modernization of distribution as we have made in the past ten years in mass production.

This is the first of three articles by Mr. Hahn. In the second, which will appear next month, he discusses the problems department stores face and their solution.



To the Outposts of Civilization!

IN every civilized country on the globe where business is conducted on anything like a modern basis Addressograph products form an important part of profit building methods. A world-wide organization has been developed to study the vast problem of name and data writing on business forms. The result is a line of Addressograph products that are cutting costs, eliminating mistakes, speeding operations and increasing sales in practically every known line of business.

A customer control system for preventing and reviving inactive accounts in every size and type of business has been worked out.

The small retailer's problem of reaching prospects quickly and economically has been solved. Corporations are provided with ways and means of saving thousands upon thousands of dollars in every department where names and data must be written on standard forms. The work is being done on Addressographs faster, better and more economically than by other methods and at a fraction of the cost.

The Addressograph representative will gladly point out *where* and *how* Addressographs will cut costs, save time and build profits. The coupon mailed with your letterhead will bring detailed information, without obligation.

Sales and service agencies in the principal cities of the world

ADDRESSOGRAPH COMPANY, 909 W. Van Buren St., *Chicago*

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Manufacturers of Graphotype Addressograph Dupligraph Cardograph Speedaumat

Model H-3—$75. Imprints names or data, 1200 to 1800 impressions an hour! Other hand operated models from $20 to $105. All prices F. O. B. Chicago.

Cardograph—$57.50 F. O. B. Chicago. Produces 1500 messages on post cards in an hour! Also imprints forms, etc.

Model F-2 Electric—$375. Handles name and data writing on all forms thru a ribbon, 2,000 to 3,000 an hour. Other electrically operated models from $295 up. All prices F. O. B. Chicago.

Dupligraph—*Model D-3* — $2,025, or leased at monthly rate. Prints 2,000 letters per hour, complete with name, address, salutation, date, entire letter and signature.

Model A-4 Automatic Feed — $2,025. Imprints an almost unlimited variety of forms, 7,500 per hour. Other automatic machines from $595 to $12,750. All prices F. O. B. Chicago.

Addressograph
TRADE MARK
PRINTS FROM TYPE

Mail with your letterhead to

ADDRESSOGRAPH CO.
909 West Van Buren Street, Chicago, Illinois.

Please advise how Addressographs will increase my sales and reduce my operating expense. 12-29

Copyright 1929 Addressograph Co.

Great-grandfather Paul Revere founded this business

HE OF THE MIDNIGHT RIDE WAS THE COPPER AND BRASS PIONEER OF THE EARLY REPUBLIC



THE OTHER COLONEL PAUL REVERE

History dramatizes Paul Revere as a daring, horseback patriot, who in spare time wrought exquisite silver bowls. In Canton, Mass., are relics of a lesser known Paul Revere, armor plate maker to the republic, pioneer in copper-rolling, founder of a great American industry. In St. James Parish Church, Cambridge, Mass., the sexton still summons church-goers with a bell cast in 1792 by Paul Revere, brass founder.

THE INDUSTRY HE FOUNDED



In 1801, on Neponset River at present site of Canton, Paul Revere built America's first copper-rolling mill. His original Revere & Son (later Revere Copper Co.) has



continued in business for over a century and a quarter. Its present-day successor is Revere Copper and Brass Incorporated. In one of the high official chairs of this company sits E. H. R. Revere, great-grandson of the founder.

✣

COPPER! BRASS!



It was the young American republic that put Paul Revere into copper and brass. When the Secretary of War wanted ten brass howitzers, Paul Revere cast them. When the famous "Constitution" needed bronze and copper fittings, he hammered them out. And only he knew how to draw the big copper spikes and bolts for the first American fleet.

But all copper sheets and plates had still to come from England. So the government gave "Revere & Son" a loan of ten thousand dollars to start his copper-rolling mill, the first in America.



✣

ARMOR, BOILERS, ROOFS

Soon Revere copper sheets armored the sides of the famous "Constitution." They fashioned the boilers in Robert Fulton's first steam ferry-boat and of the first steam Man-of-War. They roofed the dome of the Old State House in Boston.

Son Joseph Warren Revere went to Europe in 1804. He brought back "latest improved methods."

FROM REVERE TO REVERE



By now, the Reveres, father and son, were the brass and copper magnates of America.

In 1818, eighty-four years old, the doughty old colonel went to his honored grave. Son Joseph Warren carried on prodigiously. Grandson John Revere succeeded until 1886. Great-grandson Edward H. R. Revere came next, and is still on the job.

✣



A FAR-REACHING CONSOLIDATION

Last year came an important consolidation in American industry. Six successful companies joined as one . . . Baltimore Copper Mills, Dallas Brass & Copper Co., Higgins Brass & Manufacturing Co., Michigan Copper & Brass Co., Rome Brass & Copper Co., Taunton-New Bedford Copper Co. Their six plants high-spot the entire industrial area from Boston to Baltimore to Chicago. Their six units, with their specialties, combine to make a complete service in copper, brass and bronze. A natural consolidation!

In the Taunton-New Bedford unit, of which Edward H. R. Revere is President, was the original Revere Copper Company founded in 1801.

So to perpetuate the name Revere in the industry and in the very business which Paul Revere founded, the name of this consolidated group now becomes: REVERE COPPER AND BRASS INCORPORATED.

Revere Copper *and* Brass
INCORPORATED

Divisions: Baltimore *Copper Mills, Baltimore, Md.* . . Dallas *Brass & Copper Co., Chicago, Ill.* . . Higgins *Brass & Manufacturing Co., Detroit, Mich.* . . Michigan *Copper and Brass Co., Detroit, Mich.* . . . Rome *Brass & Copper Co., Rome, N. Y.* . . . Taunton-New Bedford *Copper Co., Taunton, Mass.*
GENERAL OFFICES: ROME, N. Y.

"Y and E"

The "Y and E" trade mark is the symbol of 49 years' leadership in the office equipment industry. It is the mark of quality—high standards of workmanship—integrity of purpose — constant service to customers.



Keep your
VALUABLE RECORDS
***in this* SAFE**

EVEN a small fire in a fireproof building can cause serious loss and inconvenience. There are many cases where records of no apparent value to others have nevertheless been pilfered.

Adequate protection for important business records is easily obtainable at low cost through "Y and E" Record Filing Safes.

Phone for the "Y and E" representative. He will intelligently discuss with you all types and styles of safes. He can suggest the most economical kinds to adequately protect your valuable records.

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If I Were a Boss

By A STENOGRAPHER

THE firm for which I work employs 15 stenographers, and recently pamphlets entitled "If I Were A Stenographer," by Ione De Mar, were passed around to the girls. As may be guessed, these pamphlets contained pointers for the stenographer, including efficiency, punctuality, willingness to work overtime, and interest in the firm.

If a stenographer were the essence of this booklet, she would be readily recognized by her employer and suitably rewarded.

A few tips for executives

THE girls took it well enough, agreeing that there was much truth in the booklet. There was only one fly in the ointment: would each boss cooperate? One efficient young stenographer remarked that a few pages entitled "If I Were A Boss" should be written for the bosses. She said:

If I were a boss I would greet my stenographer with a pleasant "good morning" and a genial remark; nor would I forget to end a "perfect day" with, "Good night, Miss Jones."

When I called my stenographer in for dictation, I would know what I was going to say. I would not tire her out with four and five hours sitting, and then expect her to write in half an hour what I had given.

I wouldn't smoke cigars strong enough to make her hair stand up straight, or chew the ends and spit them around the floor.

And hardest for a stenographer to bear—I wouldn't chew the cigar ends while giving dictation, nor talk out the window, nor let my voice trail off into a mutter and mumble.

I wouldn't dictate names and addresses hurriedly and indistinctly, and then walk off with all correspondence referring to those names. Many a stenographer has been on the verge of nervous prostration trying to figure out to whom to send a letter.

I wouldn't talk as fast as I could, for I would know that a good stenographer—when a letter is given plainly and moderately—punctuates and paragraphs as she goes along. This she is unable to do in rapid dictation, when a letter often has to be written over because it is impossible to get the general "punctuation sense" in first transcription.

If I used an unfamiliar word and she looked puzzled, I'd take time to explain its meaning and spelling.

If my stenographer wrote a letter with a small error that could be easily erased, I wouldn't mark the mistake in black letters with underlining.

If a letter came back to me not just as I had given it, but if what she had said was just as good as what I had dictated, I might let her ingenuity pass. Many a secretary is valuable for being able to turn a fragment of hurried dictation into a finished letter.

Or if she said, "That's what I have in my notes," she might be right. Even a boss might forget what he said in the first letter after dictating 40.

If I required that she work overtime and my firm didn't pay for it, I would at least thank her for her willingness.

I wouldn't ask my stenographer to save on paper—and then use the firm's stamped envelopes, if I were on the payroll, too!

And if I didn't want my stenographer to gossip, I would see that she had work enough to keep her too busy to talk.

I would inflate my stenographer's self-esteem by giving her the responsibility of meeting customers, taking messages, and answering the telephone. The more valuable she considered herself, the longer she would stay.

Good stenographers need pay

IF I were a boss I would hire girls who *had* to work for a living. Girls who work for "spending money" work for small pay—but many privileges. And they are the ones who most often "go romantic" over the boss.

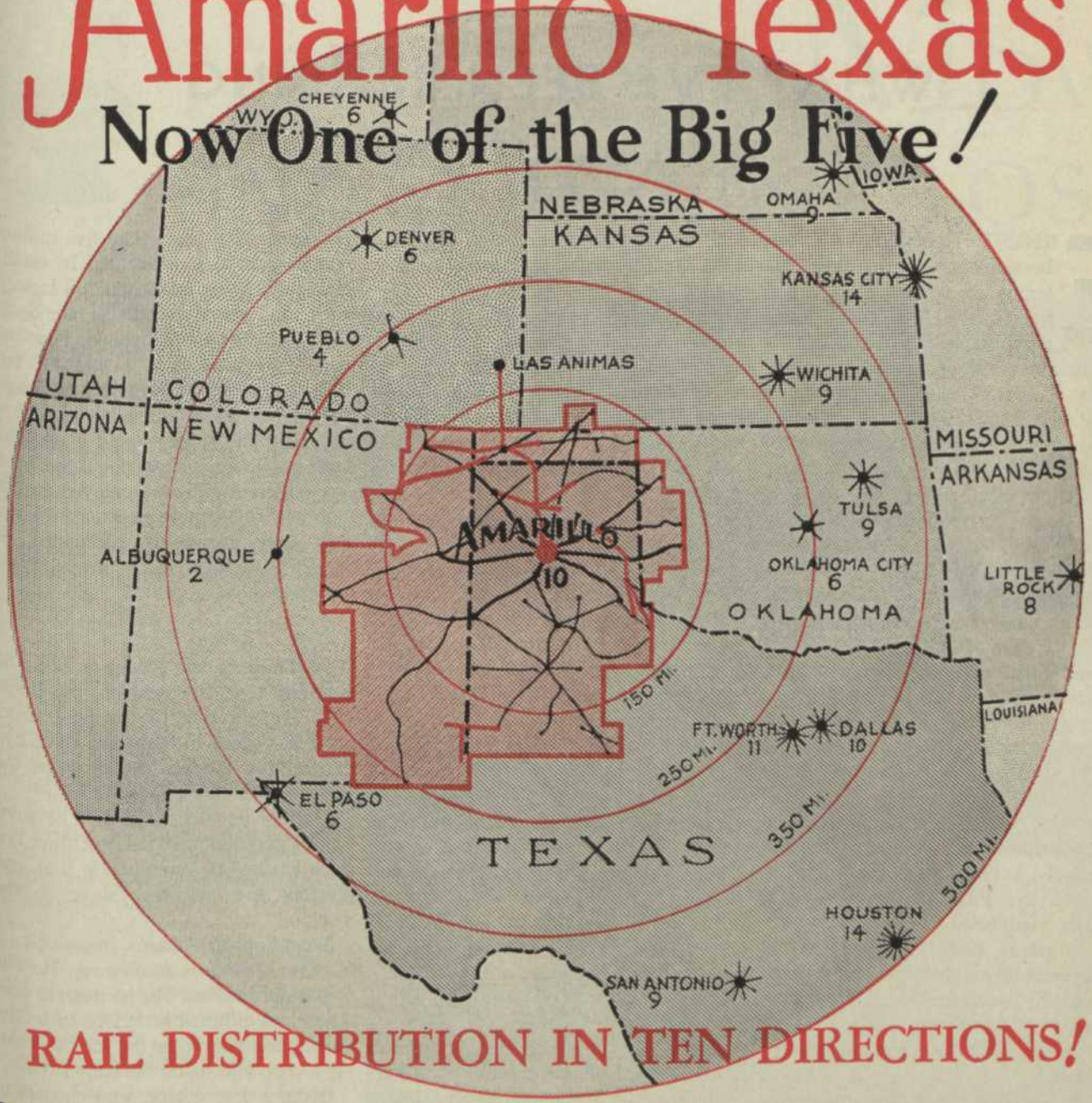
If I expected the same fine loyalty and service from my stenographer that I did from men, I would pay her accordingly. Well paid stenographers are well dressed.

A hint in diplomacy: I'd soon promote my stenographer to secretary. That one word makes all the difference in the world in her interest and enthusiasm.

Whenever you see a stenographer who is a loyal champion of her boss and her firm, you may be sure that the man for whom she works is "cooperating."

Amarillo Texas

Now One of the Big Five!



RAIL DISTRIBUTION IN TEN DIRECTIONS!

WHEN the new Santa Fe trunk route northwest to Las Animas, Colorado, is completed, Amarillo will be one of the five distribution centers in the 1,000-mile circle mapped above with rail facilities in at least ten important directions.

The city's wholesale trade area is shaded in red; with the present 2904 miles of railroads noted by black lines, and the 681 additional miles, formally applied for, in red. This new main trackage, combined with the 689 miles built in the past three years, will increase the 1926 total by 1,370 miles. . 59%!

This year 45,000,000 bushels of wheat were produced by Amarillo's territory as compared with 22,000,000 in 1928 and 11,000,000 in 1927. The city has grown from 15,594 in 1920 to nearly 50,000 today, and the wholesale trade area has matched this development.

It is facts such as these which have caused Chevrolet, General Electric, General Motors Acceptance, the major farm implement manufacturers, and numerous other organizations to place branch houses here in the past few years. Amarillo is a new and changing situation on your sales and service map; and it warrants your special analysis at this time.

For confidential information pertinent to your particular problems secured for you by traffic, commercial and technical experts, address: Manager, Development Bureau . . .



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WHAT I'VE BEEN READING

By WILLIAM FEATHER

ERNEST HEMINGWAY has become the envy of most contemporary writers. He writes as many would like to write. He uses simple words and simple construction, and produces a powerful effect. The emotion in his new novel "A Farewell to Arms"[1] is genuine. His philosophy is hard and real—no sentimentality, no mush, no undue bitterness.

A soldier and a nurse are the central figures in this book. The nurse seems to fall in love with the soldier at first sight. When he is injured she comes to his hospital to look after him. They so manage things that they spend most of their nights together. Both are living in the unreal world of war. The woman is genuinely in love, and the man is, too. They are indifferent to the outcome of their adventure. The outcome is the natural one.

♦

THE stupidity of war is presented effectively, as is the beauty and naturalness of the love of this man and woman. Hemingway never strains himself to get an effect. The story moves along languidly with tragedy and death tossed in nonchalantly. The human beings in the book are like driftwood, the victims of forces they are helpless to control.

I do not read many modern novels, but I never miss anything by Willa Cather, Sinclair Lewis, or Ernest Hemingway. I like their writing. In "A Farewell to Arms" Hemingway has written a great novel.

♦

STUART CHASE is a "bear." In the stock market a "bear" is a man who thinks that business is ready to crack, and that prices will soon be lower. Chase thinks that modern civilization is headed for hell. True, he presents the pleasant side of mass production and distribution, but the object of "Men and Machines"[2] is to point out the evil.

As I read the book the thought came to me that if a business man, or a farmer, worried about things as much as Chase does, he would blow out his brains. The intelligent man has faith —faith in the integrity of his fellow men, faith in the common sense of mankind, faith in the law of averages. Without faith, one is incompetent for leadership.

Another of Chase's weaknesses is that he spends too much time in big cities, big apartments, big hotels, and big factories. He presumes that all the people in the United States ride in subways, sleep in in-a-door beds, and eat in one-arm restaurants.

There's a lot of standardization in this country, of course, but the chief reason for it is that the standard article is better and cheaper than the non-standard article. Let Chase penetrate the hinterlands of Kentucky where the people are as unspoiled as the original settlers, and he will be less worried about what the machines are doing to us as workers and consumers.

♦

WHEN this country was inhabited by the Indians there was more famine and suffering than are known today. Chase sees no great virtue in the capacity of this civilization to support a population one hundred times as large. Well, I for one, am glad I was not omitted, and I know of no one who honestly wishes he had never been born.

A philosopher once said that nature was extremely kind since, although there was only one way to get into the world, there were a thousand ways to get out. I consider any system superior that makes life possible for 100 people where only one could exist before. That is one measure of modern civilization.

Chase's book is filled with a mass of facts, figures, conjectures, guesses, much shrewd observation, and a good deal of nonsense. Despite his fear that we shall become a nation of robots, he is unable to discover that more than five million workers can be so classified. In establishing this figure he includes all factory labor, and such workers as stenographers, telephone employes, and motormen. This gives him a total of ten million, from which he deducts approximately five million, leaving only five million in the strictly robot class. The truth probably is that not more than two million people are employed at jobs that are unbearably repetitive. Even such jobs are being eliminated as rapidly as machines can be invented and produced.

♦

BUT Chase is fair enough because he observes that five million represents only five per cent of the population, whereas Greece in her great days had five million freemen standing on the backs of 12 million slaves.

"I dare you to conclude," he says, "that a population 70 per cent slave is a more wholesome combination than one possibly five per cent slave to the machine."

According to Chase's reasoning, a housemaid's job is wholesome. Here is no standardization. The housemaid does a hundred different little jobs each day, ranging from sweeping the walk to broiling a chop and fixing the baby's milk.

Given a free choice, who chooses to be a housemaid? They are scarcer than the so-called $10,000 executives. Why worry about the cramped lives of robots when girls skip the classified ads for housemaids and line up at factory doors, hoping to be lucky enough to get a job as tender of a can making machine?

I am growing weary of Chase's alarms. In my opinion, 90 per cent of them are false.

♦

WHEN I finished reading "Salesmanship for the New Era"[3] by Charles W. Mears I immediately wanted to hand

[1] **A Farewell to Arms,** by Ernest Hemingway. Charles Scribner's Sons. New York. $2.50.

[2] **Men and Machines,** by Stuart Chase. The Macmillan Company, New York. $2.50.

[3] **Salesmanship for the New Era,** by Charles W. Mears. Harper & Brothers, New York. $3.



. . . IT'S YOUR MOVE AND YOU CAN'T LOSE

IF YOU GIVE, OR GET, AN ELGIN FOR CHRISTMAS

Christmas came long before watches, but ever since the two have been on earth together . . . they've been together inseparably, it seems.

For somehow a watch is the perfect way of saying to those you love, all the things that bubble up inside you when the mellow Christmas season comes along. Perhaps it's because a watch carries your present sentiments far into the future, saying with every beat "may every hour I record be happy as this Christmas day of my presentation."

And this is the best Christmas in sixty years for choosing an Elgin. More styles. More new shapes and sizes. Prices in a closely ascending scale, from $15.00 to $650. New combinations of metals and enamel. New settings of precious gems. A new Elgin watch family . . . the largest in the world . . . but still backed by the old Elgin tradition of fine timekeeping, accurate, faithful service and an unconditional guarantee. A completely American watch for American needs. Your nearest jeweler will be happy to show them.

A . . . Louiseboulanger Parisienne model, $35.00. B . . . Elgin Avigo, Air Corps specification aviation dial, $23.00. C . . . Callot Parisienne diamond-set, $75.00. D . . . Elgin Legionnaire, $19.00. E . . . Clock and Fountain Pen Set, $37.50. F . . . Lord Elgin, 15 jewels, $50.00. G . . . New traveling clock. Choice of blue, beige or black leathers, tooled in gold, $25.00. H . . . 15-jewel movement, 14 karat white gold case, special silk cord attachment, $65.00. I . . . Combination cigarette lighter and accurate Elgin watch, 15-jewel movement, Sterling Silver, $65.00. J . . . 15-jewel movement, in 14 karat white gold filled case, $47.50. K 17-jewel movement, 6 adjustments . . . green and black enameled decoration on case, $65.00. L . . . Platinum top case, set with 42 selected diamonds, 17-jewel movement, $500.00.



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ELGIN



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If you have a problem in electrical-motored machinery come to Robbins & Myers. We offer you the facilities of a completely modern plant, and the experience of 31 years' precision manufacture in designing, building and applying electric motors, generators, fans, and electrical appliances

Partial List of Apparatus to which Robbins & Myers Motors have been successfully applied

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Baker's Machinery	Dish Washers	Oil Burners	Spray Equipment
Blowers	Driers	Office Appliances	Ticket Selling Machines
Brick Machinery	Floor Surfacers	Organ Blowers	Vacuum Cleaners
Churns	Folding Machines	Mailing Machines	Ventilating Fans
Cloth Cutters	Heaters	Machine Tools	Unit Heaters
Coffee Mills	Heat Regulators	Meat Choppers	Washing Machines
Coin Counters	Hoists	Milking Machines	Wrapping Machines

Robbins & Myers, Inc.

Springfield, Ohio **Brantford, Ontario**

1878



1929

the book to the salesmen in my office. That is an index of the impression the book made.

This outline of the principles of salesmanship contains nothing particularly novel or startling. The title, therefore, is slightly misleading, but the book is improved by the fact that the contents do not exactly conform to the title.

♦

IF THE salesman in the new era is more scrupulous than his predecessor the improvement is due less to advance in the art of salesmanship than to progress in the art of business.

Anyone who has read "Twenty Years of Hus'ling" by J. P. Johnston, which was a best seller 40 years ago, realizes that the old-time salesmen knew all the ways of the craft. The lightning rod salesman of the 'nineties might teach a few tricks to the modern automobile salesman.

Mear's treatise is well done, not because it lists new ways to make sales, but because it emphasizes the basic methods of persuasion that have been in use from the beginning of time.

♦

THE art of courtship changes little through the decades. When the flapper decides to marry a man she probably uses a technique slightly different from her grandmother's. She exposes her knees whereas her grandmother covered her ankles. Such details, however, are insignificant. So in salesmanship. The modern salesman uses the automobile and the telephone, but he manipulates the minds of his prospects by methods that were effectively used by the Romans.

The salesman who reads this book will find in it scores of truths that he knows but has forgotten or neglected to use. He will be stimulated by the knowledge that the same old troubles that thwart him are the common lot of salesmen. He will learn how other salesmen get by the information clerk, how they handle prospects' objections by applying reverse English, and how they twist the current of the conversation to serve their own advantage.

In the last chapter of the book Mears has a paragraph typical of his philosophy. He says:

"Pollyanna might say: 'Don't get discouraged. Cheer up. Tomorrow will be a better day.' But my suggestion is that you analyze the causes that discourage you and find out where and what the fault is. If the fault is your own, correct it. If the fault is in your house or goods

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A new book, "Adventures in Redesign," contains eighteen actual examples showing how YPS engineers have helped cut costs for manufacturers in as many industries — how these experienced engineers have redesigned the present products or assisted in the development of new products.

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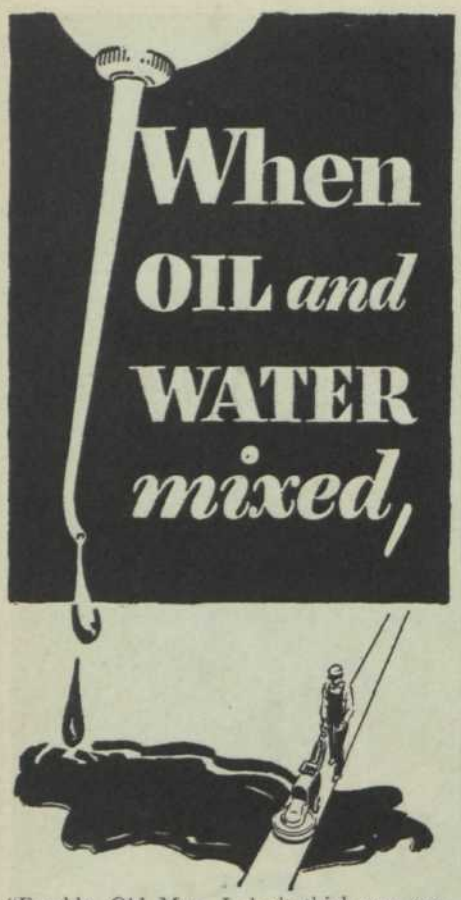
Please send me a copy of your new free book, "Adventures in Redesign."

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Address.....City and State.....

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"Frankly, Old Man, I don't think you can do it," said the Engineer of one of the world's largest automobile assembly plants to a FINNELL Engineer, ruefully surveying the loading platform before them. It had been so chipped, and gouged, and covered over with black paint, oil, and grease, that work on the platform was hindered.

But he didn't know the FINNELL Scrubber Polisher. The FINNELL Engineer set to work. At first, the FINNELL didn't seem to "dig in." Then another set of brushes was used—they tore through like bayonets—through all that ugly, stubborn coating until the grain could be seen in the wood block below.

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ELECTRIC FLOOR MACHINE

It waxes · It polishes · It scrubs



Eight models to choose from. Have a FINNELL Engineer recommend the size you should have.

Prices $87.50 and up

and cannot be corrected, sever your connection and work for another house."

♦

"HUMAN Nature and Management"[1] by Ordway Tead is an intelligent outline of the factors that cause people to give the best of themselves to their jobs. Much ingenuity has been expended in the last few decades on labor-saving machinery, and many difficult labor problems have been solved by the installation of mechanical devices. But the human element will always be of foremost importance in industry.

The management that picks its men wisely, places them in the right jobs, trains them, and stimulates their interest, can easily add many thousands of dollars to the profit side of the ledger.

One day this fall I called at a spick-and-span filling station for gasoline. The building was bright with new paint, the windows were sparkling clean, the lawn was immaculate, the cement driveway gleamed, and the pumps and other gear gave the setting a rakish, modernistic aspect.

I brought my car to a stand alongside a pump, sounded my horn, and waited. Through the windows of the trim shanty I could see the attendant in his freshly laundered uniform. Apparently, his desire was to put me in my place. He waited before he looked up. Then he yawned, rose slowly, and opened the door and presented himself.

I bought ten gallons of gasoline, and asked him to check the oil and the tires. One tire blew up when he applied the air. So there I was on a Sunday evening with a flat.

"Do you ever change tires?" I asked. No, he didn't. Did he know of a garage in the neighborhood? He thought I might find one down the street. I located a man who promised to help me as soon as he could get away. I returned to my car. Meanwhile the attendant had retired to his stationhouse where he resumed reading a magazine serial. He never came near me again, but I observed him serve two other customers as indifferently as he had served me.

♦

THE owner of the gas station is a corporation doing business all over the world. The station I patronized, one of hundreds, was designed with meticulous attention to detail. There was no flaw except in the human element. A shiftless, boorish attendant offset the good will value of a large investment.

Tead's book is designed to suggest the solution of such problems. "Human Nature and Management" is well written for professional personnel directors; in my opinion it is a little too technical for the ordinary executive.

♦

OUT of 419 pages of "The Psychology of Happiness"[2] I was unable to learn anything new or stimulating. Professor Pitkin merely seems laboriously to prove that one man's meat is another man's poison.

Most of the book is filled with endless examples of people who are happy or unhappy. Some of the happiest people are hogs. Some of the most miserable are highly intellectual.

Woodrow Wilson is dragged in, and statements are made about him which have since been denied by his closest friends. I am suspicious of Professor Pitkin's appraisal of other noted historical figures. Psychological post-mortems don't impress me.

The author also chooses to analyze many anonymous contemporaries, and to tell us what's wrong with them.

Finally, after 400 pages of fatiguing study, the professor offers this golden advice:

"Whenever you feel less happy than usual, eat less, sleep longer, exercise more, and find out whether something is worrying you. If this doesn't help, see a doctor."

♦

THAT'S exactly what Dorothy Dix has been saying for years. There's nothing wrong with the advice, or with Dorothy Dix, or with Professor Pitkin. But why use a big book to prove that two and two make four?

The last chapter of the book abounds with good paragraphs. Here is one:

"Medicine and hygiene contribute more to the enlarging of personality than psychology and psychiatry ever can. And when I say this, I do not belittle the latter. Every psychologist who has dealt with individual cases soon learns that a host of silly folks hang around psychoanalysts and neurologists, paying fat fees and hoping to be cured of their mental ailments, when all they need is the right food, the right eyeglasses, the right sleep, the right exercise, or something else quite as simple."

[1] **Human Nature and Management,** by Ordway Tead. McGraw-Hill Book Company. New York. $3.50.

[2] **Psychology of Happiness,** by Walter B. Pitkin. Simon and Schuster. New York. $3.

212 MANUFACTURING OPPORTUNITIES *in* KANSAS CITY



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INTENDED *not* for general distribution but for executives in businesses, large and small, who are scanning the industrial horizon for lucrative markets that will yield readily . . . profitably . . . to more intensive marketing, this book was written.

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INDUSTRIAL BROWNHOIST

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The Distribution Census and You

(Continued from page 37)

to have been taken in the territory he served, showed him the folly of guess work in distribution and he was quick to take advantage of it.

The test census showed this wholesaler how to stop a leak in his cash box. The national distribution census can do the same for the shoe manufacturers, wholesalers and retailers all over the country.

Still sticking to the shoe example, this is the procedure, tentatively agreed upon, which will take place when the census taker visits a retail shoe store.

The first question will be the name of the establishment. Then the census taker will ask the name of the owner and mark down the geographic location by state, county, city and street address and will note whether the establishment is within the corporate limits of a city.

He will ask the number of proprietors and firm members, unless it is an incorporated company.

Employes are to be classified

PERSONS in the large stores working on salary or wages will be noted with separate classifications for buying and selling employes as well as for non-selling, such as delivery men, porters or laborers

Administrative employes, clerical assistants, cashiers, stenographers and general office employes, will be classified together with salaries paid them and whether they work part or full time.

The enumerator then will ask what the number of paid employes is for the months, April, July, October and December. This is necessary to observe seasonal business.

Next he will ask for an inventory of stocks on hand for sale at the last available date. Then he will determine whether the store handles anything except shoes, making a note of annual sales for each commodity or class of commodities.

He may find that the shoe store carries a sideline of cigars, cigarets, pipes and smoking tobacco—some of them do—and this will be of interest, not only to other shoe retailers but to tobacco dealers as well.

Coming to the sales of footwear, the enumerator will ask for correct or accurately estimated figures on men's, boys' and youths', women's, misses' and

Walled in — until you tear down the building!

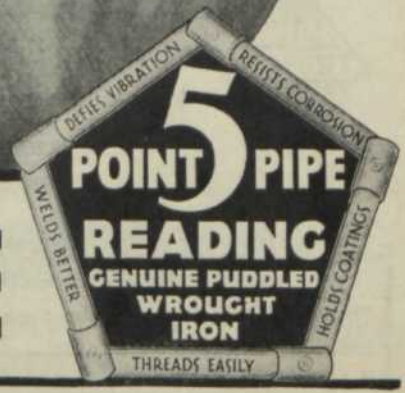


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Individual_____ Company_____
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children's, infants' shoes, rubber footwear, athletic and other footwear.

Then the census taker will ask for 1929 cash sales totals, credit sales on open accounts and deferred payment sales. If the store has departments, he will ask if any departments are under lease, the rental derived from such leases and the gross sales in the leased department.

Finally, the person giving the information will be asked to sign the census sheet certifying that the information is correct and complete to the best of his knowledge and belief.

All individual returns are to be kept in the strictest confidence by the enumerator and are guarded as confidential government reports. Only the completed figures, without reference to individuals, will be made public.

A basis for study of ills

OF COURSE, no census can show means to correct ills found to exist. It only can present the figures for intelligent study and interpretation.

It is known that comprehensive information showing the numbers of distributors, differentiating between functions, such as wholesale and retail, and by type such as department stores versus the ordinary retail store, and segregated by small geographic units, will be of great value to those engaged in distribution.

The more information that can be added within a reasonable degree of accuracy, the more the value that will be added to such a census.

To facilitate the administration of this census as well as to render the results more useful, it will be helpful to carry a unified and comprehensive scheme for questionnaires through a large part of the distribution field. Thus the questionnaires for retailers may be closely related in general features to those used even for the distributors of industrial goods. The whole business should dovetail together.

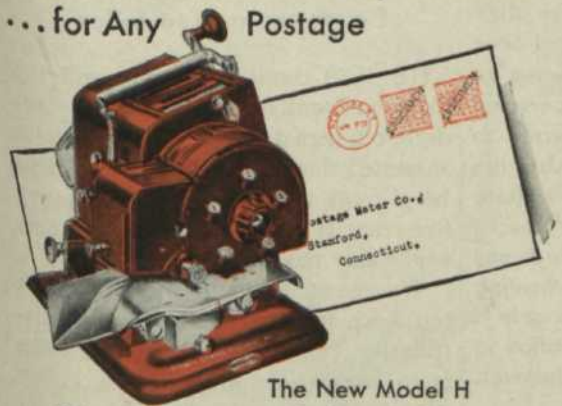
Collecting fundamental data

OWING to the fact that the field of desirable distribution data is so much wider than any initial national census of distribution can possibly cover, it becomes necessary for us to establish our work carefully so that it may be fundamental in character—fundamental in that it will afford points of departure for historical or trend comparisons in the future when better censuses shall have been taken in the light of our ex-



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THIS HUMANIZED SYSTEM OF INTER-OFFICE TELEPHONES



brings efficiency at times when it is most needed



IN the whirl of a busy day you wish to speak to your secretary, your bookkeeper, your sales manager—or perhaps, all three at the same time . . . Without stopping for a moment to interrupt your work, you flick a key on the small instrument across your desk and talk ✣ ✣ ✣ Crisply, clearly the reply comes back—as quickly as if the party were actually in your office ✣ ✣ ✣ Not a minute is lost in establishing immediate conversational contact over the Dictograph System of Interior Telephones. Your department heads answer your questions, make their reports, or even engage in a "conference" without once leaving their desks—without waiting for "busy wires" to be cleared at the office switchboard ✣ ✣ ✣ So personal—so life-like is Dictograph that it is often referred to as the "Human Telephone." It always understands—the first time—always gets attention ✣ ✣ ✣ Dictograph lifts a burden from your telephone switchboard . . . the "door is always open" to incoming calls. It banishes the handicaps of the old-time buzzer system—eliminates the time-wasting confusion of inter-office visiting ✣ ✣ ✣ It will take only a few moments to show Dictograph in actual operation in your office and you will be under no obligation whatever.



FREE TO BUSINESS EXECUTIVES



DICTOGRAPH SYSTEM OF INTERIOR TELEPHONES

A COPY OF ROBERT C. BENCHLEY'S NEWEST AND FUNNIEST SATIRE ON BUSINESS: "BUSY IN CONFERENCE." *The happenings at a typical business meeting gently lampooned by one of America's keenest satirists . . . Illustrated by Rea Irvin . . . The book will be mailed with our compliments to any executive who will address a request to us on his official stationery.*

DICTOGRAPH PRODUCTS CO., Inc., 222 W. 42nd STREET, NEW YORK

When writing to DICTOGRAPH PRODUCTS CO., INC. *please mention Nation's Business*

perience; fundamental in that it will serve as a basis for important surveys to be made later by both public and private agencies, and fundamental in that it will yield immediate, worth-while information.

We must be careful not to weaken the character of our work with detailed information which in itself would be of great value but the taking of which might interfere with the establishment of proper foundations. The extreme geographical and functional breadth of this task stands in the way of including certain things that would be highly practicable if undertaken on a smaller scale. Not only is the question of the budget involved, and that of administration, but it is impossible for us to obtain an army of highly trained men to help us take this census.

Moreover, the breadth of the field to be covered introduces a complex element in psychology, which is quite familiar to all practical census men. It is found that complicated questionnaires introduce the element of fatigue or carelessness, and that elaborate questionnaires tend to be based on the canvassers' imagination rather than on any true field canvass. Thus it may not be possible for us to carry out within our prescribed scope many things which could be managed successfully by any good agency covering a narrow field.

Better censuses to follow

THE 1930 census, we hope, will lay the groundwork for other and more elaborate censuses and surveys. It has been suggested that a distribution census to be of most value must be taken every five years. It is possible that the business world may request this.

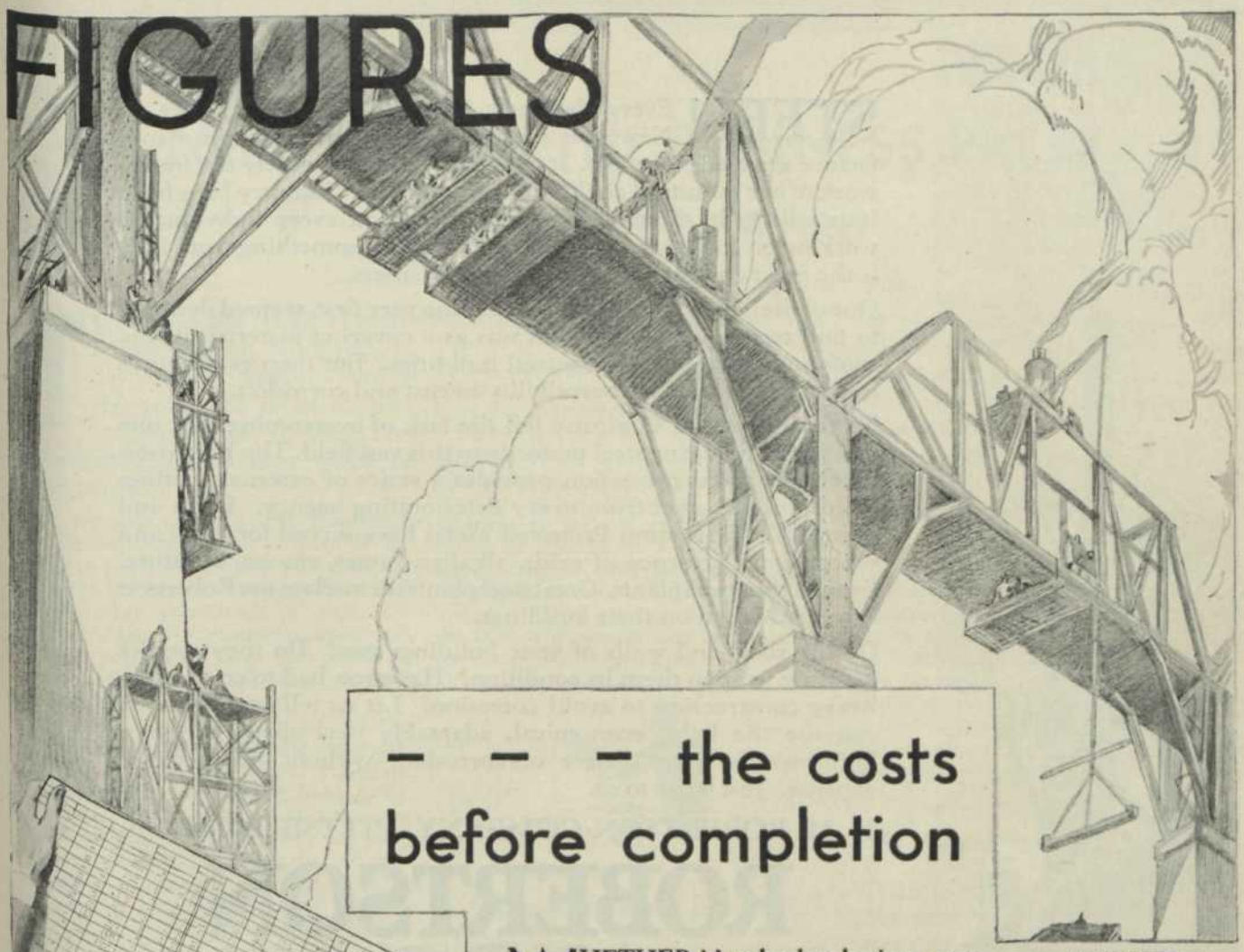
We cannot include too much or omit too much in our first inquiry into distribution. One of our most difficult tasks is to strike a happy medium. Every manufacturer, wholesaler and retailer wants his certain commodity dealt with completely. It is obvious we cannot do that at the start. Maybe in the future it will be possible, but to include too much might kill the entire purpose of the 1930 census by making it unwieldy.

We will try to get the most important items, which we believe are available. Even this will mean many questions to be asked of each distributor.

What the 1930 census will show we can only guess. It may reveal glaring faults, or it may disclose but minor ills.

Whatever they are, they will be shown. The rest will be up to the manufacturers, wholesalers and retailers.

FIGURES



– – – the costs before completion

WHETHER it's a bank, a business or a bridge, you need the guidance that figures can give. Every morning you want yesterday's figures—vital facts about materials used and in stock, about sales, payrolls and purchase commitments.

How can you get them? By substituting mechanical equipment for the age-old, slow and expensive hand methods. With accounting machines, figures are accurately compiled, totaled and tabulated in time to be of use. With them you know, while work is in progress—what it costs to produce.

Remington Rand is the world's largest maker of office equipment, business accounting systems and machinery. A staff of 4000 specialists is engaged in modernizing the figure-getting methods of every kind and size of business. One or more of these technicians can make or save you money. Their services are yours for the asking. Write or phone the nearest Remington Rand office.

REMINGTON



POWERS



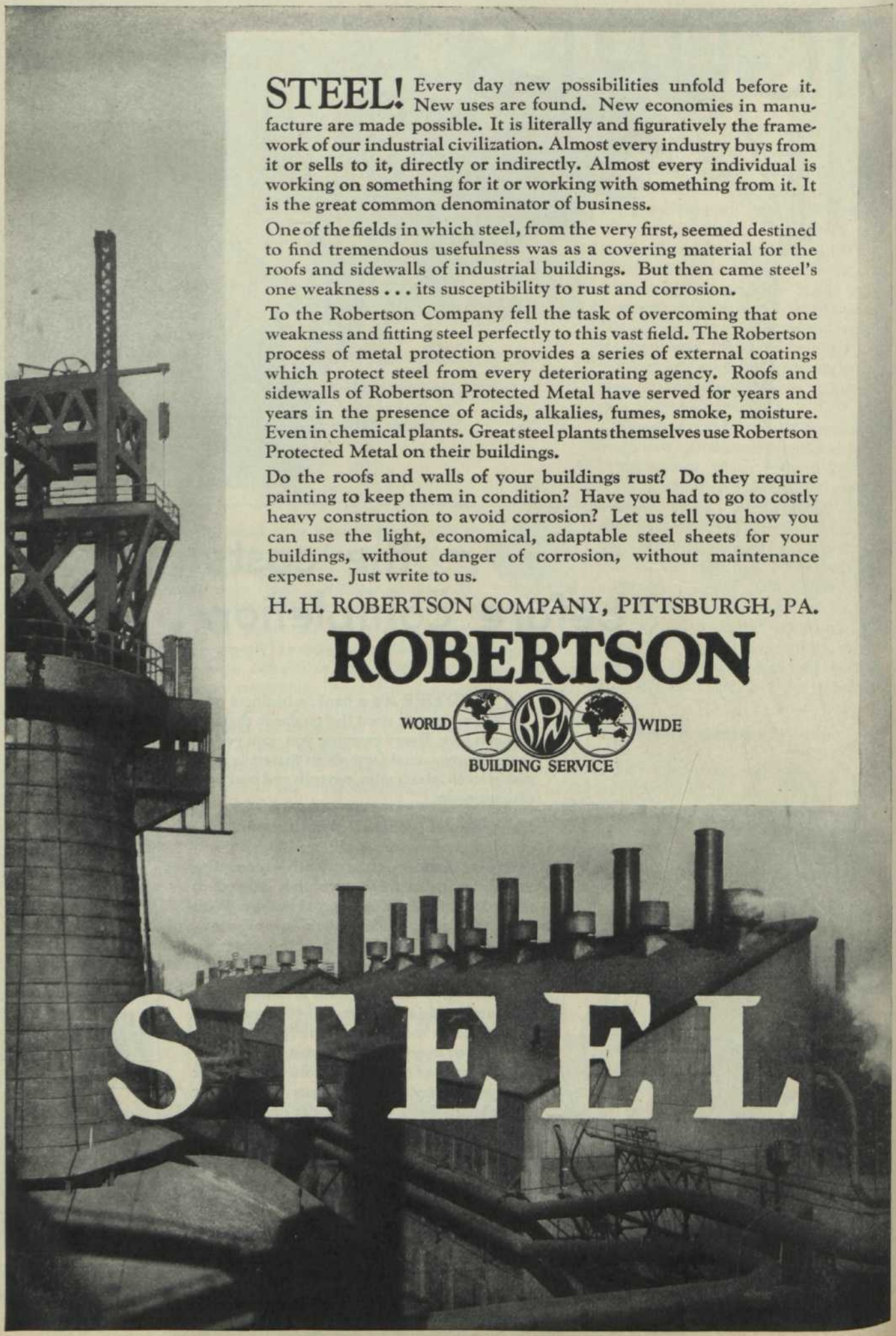
DALTON



Remington Rand
BUSINESS SERVICE
BUFFALO NEW YORK

FIGURES – *The Yardstick of Modern Business*

When writing or phoning Remington Rand Business Service *please mention Nation's Business*



STEEL! Every day new possibilities unfold before it. New uses are found. New economies in manufacture are made possible. It is literally and figuratively the framework of our industrial civilization. Almost every industry buys from it or sells to it, directly or indirectly. Almost every individual is working on something for it or working with something from it. It is the great common denominator of business.

One of the fields in which steel, from the very first, seemed destined to find tremendous usefulness was as a covering material for the roofs and sidewalls of industrial buildings. But then came steel's one weakness . . . its susceptibility to rust and corrosion.

To the Robertson Company fell the task of overcoming that one weakness and fitting steel perfectly to this vast field. The Robertson process of metal protection provides a series of external coatings which protect steel from every deteriorating agency. Roofs and sidewalls of Robertson Protected Metal have served for years and years in the presence of acids, alkalies, fumes, smoke, moisture. Even in chemical plants. Great steel plants themselves use Robertson Protected Metal on their buildings.

Do the roofs and walls of your buildings rust? Do they require painting to keep them in condition? Have you had to go to costly heavy construction to avoid corrosion? Let us tell you how you can use the light, economical, adaptable steel sheets for your buildings, without danger of corrosion, without maintenance expense. Just write to us.

H. H. ROBERTSON COMPANY, PITTSBURGH, PA.

ROBERTSON

WORLD WIDE
BUILDING SERVICE

When writing to H. H. Robertson Company *please mention Nation's Business*

TOPICS FROM THE BUSINESS PRESS

By PAUL H. HAYWARD

TWO things are needed to make possible regular, safe flying, in any kind of weather, *Airway Age* points out in an editorial entitled, rather optimistically, "Overcoming the Weather." One of these things we read,

is a weather reporting and forecasting system which will make it possible for pilots to know at all times what they are facing in the way of bad or good weather.

The other prerequisite of safe, all-weather flying is instruments which will make it possible for them (the pilots) to keep their planes aloft and on their courses, regardless of storms.

Progress is being made in the direction of efficient weather reporting. Likewise, progress is being made in the perfection of instruments to facilitate blind flying, a necessity in many storms. It may never be possible to fly airplanes in any kind of weather, but the regularity of performance of many of the air lines at the present time indicates that adverse weather is not an insurmountable barrier.

The present practice, particularly of the passenger air lines, is to set their ships down when storms loom ahead. Unquestionably, this is the only sound policy at this time, but inability to overcome bad weather and to render it ineffective insofar as airplane operation is concerned, should not be considered an unattainable goal.

Mark Twain's comment that much is said about the weather but little is done about it does not apply, fortunately, to those in aviation. Something is being done about it, but still more remains to be done.



• Who Bosses the Bosses?

THE QUESTION of who bosses the bosses, in the case of executives of at least one large corporation, has found an answer. The "big boss" of these particular executives in one respect at least, *Automobile Topics* reports editorially, is the corporation's staff physician. Medical departments associated with large corporations, it prefaces the report,

have grown up more or less in a defensive capacity, often, alas! with humane considerations more or less on the side. They have been exceedingly useful in preventing malingering, controlling workmen's compensation losses, and, of course, in caring for emergency cases.

Prospects for a new function for the company doctor are opened up, however, by the recent ruling in one big concern that the official physician's authority is supreme in matters pertaining to the health of executives. Cases have been known of highly paid executives literally working themselves to death, and modern business should countenance nothing of the kind. The way to stop it is to make the doctor a vice president.



• A Danger to Every Business?

RACKETEERING, that malignant growth that has fastened itself upon certain businesses in several of our larger cities, is deemed by *The Furniture Warehouseman* to be of sufficient extent and menace to warrant a general warning to business men against "strong-arm" methods of meeting competition. Not only warehousemen, but all other business men, are solemnly advised to "stay away from anything that smacks of racketeering."

"Nothing of lasting value can come from the strong-arm method of forcing competitors to behave," it is declared,

and time and effort can best, by far, be spent on education. Business men should not go to thugs and the underworld to do for them in a violent way what they themselves have the power to accomplish in a friendly and constructive way.

If competition is getting out of hand and if it must come to some form of autocracy to continue, or to correct conditions, hire a Judge Landis. While resorting to racketeering by warehousemen seems a remote possibility, racketeering control of organizations is developing very fast, and is a danger in the offing for every industry.

There follows a statement by Gordon L. Hostetter, executive secretary of the Employers' Association of Chicago, to the effect that racketeering cost the city of Chicago $136,000,000 in 1928 and that it is destined to take an even larger toll this year. At present there are 94 organized rackets in Chicago, it is asserted.

"Each garage owner belonging to the garage racket, for example," the article continues in explaining Chicago racketeering methods,

was assessed one dollar per month per automobile in his garage. In return he was guaranteed as against competitors entering his neighborhood and offering motorists lower rentals.

In the cleaning and dyeing industry the owners were assessed so much per article cleaned or dyed, on the same agreement. The same system was introduced in every other field which the racketeers "organized."

• Are We to "Unmerger" Now?

"THIS IS the age of mergers," we are frequently told, but *Retail Ledger* notes that some of these business marriages—like many personal *mariages de convenance*, we might interject—have not proved entirely blissful and

there is at least one indication that the pendulum has begun to swing in the other direction. It has been an open secret for some time past that the "wedding" of the Winchester Arms Company and the Simmons Hardware Company wasn't precisely a happy marital union. So, as is not unusual in matters of this kind, a divorce was arranged and indications are that both parties will live happily ever after.

This may or may not be significant, but it at least marks the beginning of the unscrambling process and it would not be surprising if there were other "unmergers" before the end of the year.



• When Pots Were Jewels

"METALS NOW seem to be so cheap that we have become very wasteful of our resources," writes Stephen L. Goodale in *The Pittsburgh Record*. That waste is so extensive that it constitutes "a problem of national interest and im-

Lifting loads *to lower handling costs!*

That's precisely what industry is doing—doing it electrically with Shepard Hoists!

This new book of "Illustrated Economies" gives numerous graphic examples of savings in time and labor; in improvements in production flow; in the elimination of inefficient, back-breaking jobs, through the use of planned load-handling.

Using the ceiling for material handling means greater floor area for those production machines that must be on the floor. And Shepard offers an electric hoist of the type and capacity precisely suited to any job. The maximum of handling efficiency is assured.

SHEPARD NILES CRANE & HOIST CORPORATION
354 Schuyler Ave., Montour Falls, N. Y.
Works: **Montour Falls, N. Y., Philadelphia, Pa.**

Ask for the new "Shepard Book of Illustrated Economies"



Shepard Niles serves industry with:

Transfer Cranes —I-Beam Cranes —Gantry Cranes —Wall Cranes— Jib Cranes— Bracket Cranes —Cage Operated Hoists — Floor Operated Hoists —Cupola Chargers — Shepard Track & Switches —Winches.

SHEPARD
CRANE & HOIST DIVISION

When writing to SHEPARD NILES CRANE & HOIST CORPORATION *please mention Nation's Business*

portance," he points out and adds that the situation

is very different from that in early times. At the time of the Spartan supremacy in the ancient Grecian world a lump of malleable iron of some fifty to seventy pounds weight was sufficient for the ransom of a king. At the time of William the Conqueror the smith was treated as an officer of the highest rank because of the dependence on him for arms and armor. Even in the days of King Edward III, in fourteenth century England, the pots, spits, and frying pans of the royal kitchen were classed among the king's jewels.

◆ The Language of the Line

HIGHLY DESCRIPTIVE, if not elegant, is the language that is bandied in the freight yards and cabooses of the American railroad line. J. A. Hamilton, general freight agent, Kansas City Southern, writing in *Railway Age*, reports a few gems from the railroaders' extensive lexicon, as follows:

Our department has occasion to receive every day from the yard office a consist of cars with commodities, and in quite a few instances the mud hop (yard clerk) designates these commodities by a railroad term. As illustration:

Yellow Pine Lumber and Timber—Louisiana Bananas
Catalogs—Women's Wish Books
Wash Boards—Women Tamers
Fuel Oil—Soup
Automobiles—Joy Wagons

A car of gravel, he adds

is referred to as the "little rock special" and some of the boys on the line designate an engine running with only a caboose as a "horse and buggy." When one of the yard force is off with chills and fever, the malady is referred to as "box-car colic."



◆ Conductors and Plug Hats

AND QUITE as picturesque as the modern railroad cant must have been some of the old-time railroad practices, if we may credit the following extract from an article by Floyd W. Parsons in *Advertising and Selling:*

The first locomotives were called "Hell on Wheels," and the tracks they ran on were torn up several times by mobs. Each road had a different gauge and width, making it necessary for passengers to get out at all terminals and transfer from one line to another. The first conductors supported their dignity with plug hats, frock coats, and high choker collars.

The rules of one railroad 50 years ago



Fokker Planes Fly Universal Lanes

Out of the sky comes the modern business man... refreshed, eager. Through the air... where the way is straight, swift, and clean... he saves many precious hours of wearisome travel, and finds that remote cities have become neighbors.

His trip is always pleasant, and relaxing. The world below drifts leisurely backward. Hills are mysteriously ironed away. Cultivated farmland reveals its beautiful checker-board pattern. Cities shrink to toy villages, their autos to June-bugs, their trains to tortuous snakes.

His reverie is arrested as the Fokker glides gently to its landing place... at Chicago, at Cleveland, at Kansas City, at St. Louis, at Tulsa, at Oklahoma City. "On time" always, in a Universal Air Liner.

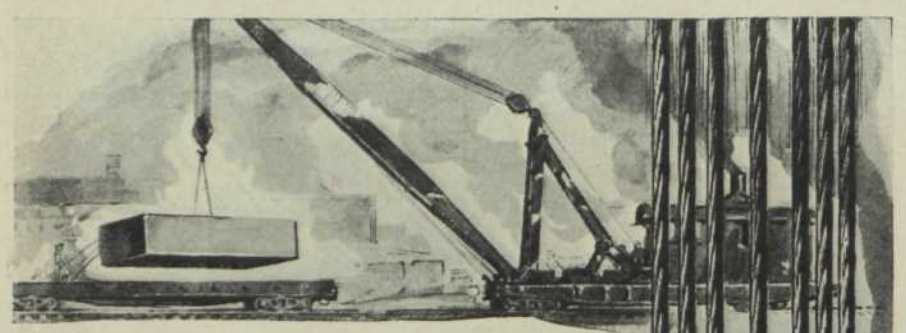
Fokker planes have been chosen for Universal Air Line Systems to assure the speed, comfort and safety necessary for this modern and luxurious mode of travel.

Other commercial lines using Fokker super tri-motor air lines are: Western Air Express, Southern Air Transport, Pan-American Airways, Standard Air Lines, National Parks Airways, Dominion Airways, Western Canada Airways.

If interested in air travel, send a 5-cent stamp (to pay air mail postage), and we will send you our illustrated booklet, "When Air Travel Pays." Address the Fokker Travel Bureau, 23rd Floor, 292 Madison Avenue, New York City, Room 2300.

FOKKER AIRCRAFT CORPORATION OF AMERICA

Factories: WHEELING, WEST VIRGINIA, *and* TETERBORO AIRPORT, HASBROUCK HEIGHTS, NEW JERSEY
Address inquiries: NEW YORK OFFICE, 1775 BROADWAY



Industry's Mainstay
—and yours

Few realize how the individual, as well as industry, is dependent upon wire rope—the great flexible "handler" of practically everything.

The illustration shows a great slab of concrete bridge flooring being lifted onto a freight car.

All the material in a modern skyscraper is handled with wire rope—in the "raw;" in shipping; in the actual building erection.

Oil wells are drilled with wire rope; mines are mined and quarries quarried with it. Your furniture and the evening newspaper both originated in logs taken from the forests with wire rope.

Yellow Strand Wire Rope will usually be found where real stamina is demanded. Not mere strength, but strength so nicely balanced with elasticity, flexibility and resistance to the crystallizing effect of vibration, that long life under severest conditions is assured.

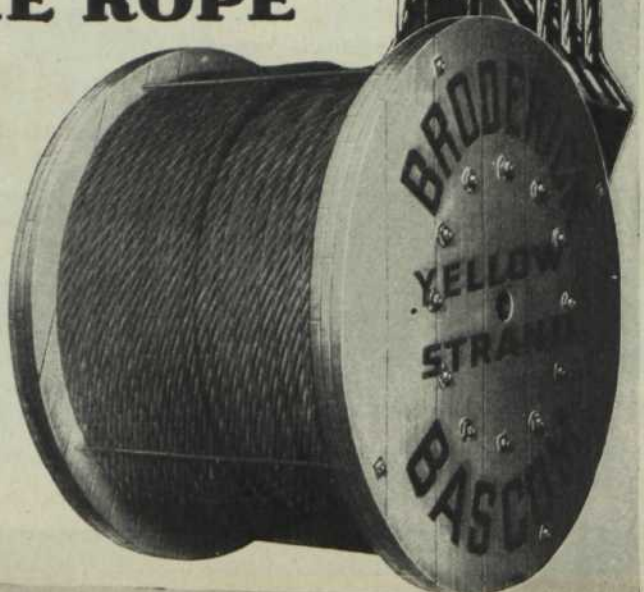
One *strand of yellow* distinguishes this high quality rope from all others.

Broderick & Bascom Rope Co.
St. Louis, Mo.

Eastern Office and Warehouse: 68 Washington St., New York
Western Offices: Seattle and Portland, Ore.
Factories: St. Louis and Seattle

Manufacturers of nothing but wire rope for over half a century.

Yellow Strand
WIRE ROPE



Aerial Wire Rope Tramways designed by this company have features that insure economical operation.

B790R77

warned workers against whistling or any show of levity while on duty. They were told that evidence of regular attendance at church would be considered a point in their favor when the matter of promotion came up. Passengers as well as workmen were forbidden to smoke on trains or in stations. No employe was allowed to use any wearing apparel of a red color because of the possibility of an engineer mistaking the red as a signal of danger.

◆ Leaders of Ten Years Hence

MORE THAN one sales department, declares *Class & Industrial Marketing*, in its battle to keep its volume of sales in step with the rapid strides of mass production, has been confronted with the law of diminishing returns.

"The problem is generally referred to," the editorial continues,

as the "rising costs of selling." More than one marketing expert has already pointed out that this mad rush for sales volume, which has already inaugurated here and there serious cases of profitless competition, must stop because it is not economic. One thing that is needed, most of these experts agree, is a broader view of the fundamentals of economics and business.

So long as the burden of the worry rests with the sales and advertising departments it is up to the executives of these departments to do the looking ahead and to acquire this broader view of business management. How many of these executives are able or are willing to give the time to study? The leaders five or ten years from now will be the ones who are doing it.

◆ From Refrigerators to Tea

GLANCING THROUGH *Commerce and Finance* we sift these bits:

Half or more than half of the population of this country does not have a refrigerator in the home . . . an average of 4.65 horsepower is back of each worker in manufacturing today . . . the real principals in the bucketshops and similar fake organizations that spring up from time to time throughout the country, number less than 50 men . . . 20 years ago there were probably ten times as many "master minds" in that particular racket . . . there has been no failure among Canada's chartered banks with their 4,162 branches since 1923 . . . stores in the larger cities sell more cotton underwear than those in the smaller cities and the East leads in the sale of men's cotton undergarments . . . keen competition in the hosiery industry has made it possible to buy some silk stockings for less than a dollar a pair . . . Hudson's Bay Company recently made the first shipment of goods from Winnipeg to Europe via the new railway to Churchill and the Hudson Bay route . . . the capital fund raised by investment trusts is estimated to aggregate around $3,500,000,000 . . . "The Old Homestead" played for 25 years, most of the time in the same theater and with the same star . . . Ceylon, a black tea, leads all other varieties in imports to the United States.

LABOR COSTS CUT 12½% by MAY'S BONUS METHOD

Central Scientific Co., Chicago, saves on small lot items

"Because only 50 of our 3,000 items are made in large quantities, ours was a difficult problem. . . . We installed the May Bonus Method in 65% of our plant. Now, with less than 1% added to our labor cost, our production units have increased 10% and the product value 7¼%. Although the men earn from 10% to 25% more, the company is saving 10% in general production costs, and in the departments under bonus, 12½%. . . . When the May system is completed, the yearly savings will run three times the cost of May's service. Because of the complicated nature of our industry, we feel that if May's Bonus Plan can make good for us, it should succeed anywhere."

The quotations used in this advertisement are from a Gould Report of the Central Scientific Co., Chicago, and are guaranteed authentic. More detailed reports and data on other May installations may be had on request.



The Chicago Plant of the Central Scientific Co., Manufacturers of Scientific Apparatus and Instruments

INTERNATIONAL GOULD MANAGEMENT REPORTS CERTIFICATION

George S. May

COST REDUCTION ENGINEERS

2600 North Shore Ave., Chicago 712 Chanin Bldg., New York City

They Turned a City Around

(Continued from page 33)

interpolate a statement here. The Van Sweringens throughout their career seem to have toted fair with their investors. They now control 12,000 miles of railroad, and they have been as scrupulously careful of the interests of the minorities—which have at times opposed their plans—as of the majority stockholders.

In creating Shaker Heights they looked far ahead, streets and sewers and landscaping were controlled by them and lot buyers were not permitted to follow their often vagrant fancies in construction. Houses must be of certain defined types and values in the various sections. It is not an overgenerous compliment to say that the 10,000 acres of the Shaker Heights development today compose the most artistic creation of the sort in the world of anything like the same area.

After that first venture they pushed on, secure in the conviction that Cleveland must extend toward Youngstown. They had obtained transportation for their home buyers through the cooperation of President Stanley of the Cleveland Street Railways. He had not at first been interested in the building of an extension to a new suburb. Modern enterprise was only beginning to shake off the Victorian shackles. But—

"We'll insure you against loss," said the brothers. Something like that.

"On that basis we can do business," said Stanley.

They bought more land and needed more transportation for their customers. But a change had come over the aspect of affairs. Perhaps—who knows?—Tom Johnson was partially responsible for what followed. He was preaching three-cent fare for Cleveland and the investors in street railroad property saw their security threatened. Stanley would not tempt further attack by extension. Something had to be done, for only one-fifth of the Van Sweringens properties was properly served.

On the map was a thin line which marked the course of Kingsbury Run. Others saw it as a gully which interfered with the city plan. The Van Sweringens saw it as a rapid transit roadway from their properties straight to the old heart of the city at the mouth of the twisting Cuyahoga River. Before they could build a railway line, however, they must have a place in which to set their terminals. The Old Nickel Plate had the property they wanted, and the Nickel Plate would not sell. They were blocked.

The Van Sweringens learned at this juncture that the New York Central was about to divest itself of the control of the Nickel Plate Road because of the statute relating to parallel and competing lines. They learned, moreover, that this control could be acquired for $8,500,000. The New York Central wanted $2,000,000 in cash and $6,500,000 deferred payments. This was in 1916. The Van Sweringens had precisely one-quarter of a million dollars available. With 24 hours of their option yet to run they returned to Cleveland and sent a call to their friends.



HORYDCZAK

Business places such as the one shown here help make the Shaker Heights development outstanding in point of artistry and charm

The money was raised in the time allotted, and so the terminals were built for the rapid transit line down Kingsbury Run, which was to change the current of Cleveland's progress.

Made a poor road good

Immediately after acquiring the Nickel Plate the Van Sweringens went in quest of the man to run it. They were told that John J. Bernet was that man. Bernet was then an operating vice president of the New York Central. He had once remarked that he would like to get hold of the Nickel Plate.

Bernet went to the Van Sweringens. It is characteristic of the men involved that he did not ask what his salary was to be, nor did they give it a thought. The three men were solely interested in the job and what it held. Presently Bernet had the Nickel Plate on its feet. Then it began paying dividends.

So far as I know, there is no other similar instance in modern railroad history, but the Nickel Plate paid off the balance of the debt out of the profits earned. Meanwhile the Van Sweringens had been going to school in railroading.

The Nickel Plate had become a prosperous railroad, but it was only a bridge. Little freight originated along its line. It had nothing to trade for business.

It may be—I do not know—that even then O. P. Van Sweringen's penchant for map studying had indicated what must be done. St. Louis had a system of freight terminals open to all railroads. If he could get access to the terminal road he might take his chance with the other roads entering that rich gateway. The purchase of the Clover Leaf put him in St. Louis. Then the Lake Erie and Western got the Van Sweringens into the rich Peoria country. Their acquisition of the Chesapeake & Ohio and Hocking Valley gave them access to rich bituminous territory in West Virginia, with a route to tidewater and a Great Lakes outlet at Toledo.

If this were the story of the creation

How to be *Generous*— to a man at Christmas



JUST how does the Gillette Fifty Box qualify as the ideal Christmas gift for a man? Here's how—on these eight counts:

It is practical . . . Man, famous for his practical mind, insists on useful gifts.

Yet he probably wouldn't buy this for himself . . . From long habit, he is used to getting his blades in packs of five and ten. This will be a new and refreshing idea for him.

He'll be sure to use it . . . Blades are a daily necessity in every man's life. The Gillette Fifty Box is the most convenient way to have them.

It is personal . . . It's all to himself, for his own intimate, bathroom use.

It is good looking . . . Packed, as you see, in a metal box, velvet lined, with a spring-hinge cover. Blades are enclosed in brilliant Cellophane.

It is truly generous . . . With fifty smooth, double-edged Gillette Blades in easy grasp, a man can look forward to more continuous shaving comfort than he has probably ever enjoyed before in his life.

It will last well beyond the Christmas season . . . For months his mornings will be free from all thought of buying Gillette Blades.

It is reasonable in price . . . Five dollars buys this *ideal* gift. On sale everywhere.

GILLETTE SAFETY RAZOR CO., BOSTON, U. S. A.



Gillette

Gillette

Five Dollars

GIVE HIM SHAVING COMFORT IN ABUNDANCE WITH THE FAMOUS FIFTY BOX OF GILLETTE BLADES



IF you (too) have noted the Tremendous Strides made by Big Business in the past few months—if you have remarked the Bold Solutions of Major Problems, and admired the Efficiency of the Head Men in Straightening-Out, Expanding, Declaring, Taking-Up, Cleaning-Up, and Arriving-At—then you have witnessed the profound effect of the instantaneous welcome given a new cigarette—a cigarette which will make no man see clearer, think straighter, sleep sounder or act bolder, but a cigarette which tastes, to wise people, a lot better. That helps any conference, somehow.

BROWN & WILLIAMSON TOBACCO CORPORATION
Louisville, Kentucky

Blended PUFF-BY-PUFF



Twenty Cents
PLAIN OR TIPPED

31

DISTINCT GRADES of rare fine tobacco (from Turkey, from Virginia, and from Kentucky) are blended in Raleigh so subtly that every puff is an *experience* in taste—and rolled so cleverly that every puff is identical in balanced blandness with every other puff. That's why, for brevity and music, we say it is blended "puff-by-puff."

of a fourth railroad system in the East I would go into more detail on the purchase of the roads that followed and their management by the Van Sweringens and Bernet. But it is not.

It is the tale, as I see it, of one of the most significant ownership operations of recent years. So far as the records show or as I know the Van Sweringens have not been speculators. They have never operated on the market. They have persistently created property values.

They have made or restored values in the most conservative fashion possible. They have at all times safeguarded the interests of their coinvestors. The profit has come from betterments and dividends. Never from market gambling.

A toy for speculators

The Erie had possibilities. Yet it had been despaired of since Daniel Drew and Jay Gould wrecked it. For half a century it had been a plaything on the Stock Exchange. It had grown—of course—as the country grew. But the investors in it never had faith. It was littered with outworn rolling stock on a slow track.

The Van Sweringens needed it for an eastern gateway, and bought it, and presently it was prosperous. The Erie's story is a romance in itself. Now they had railroads.

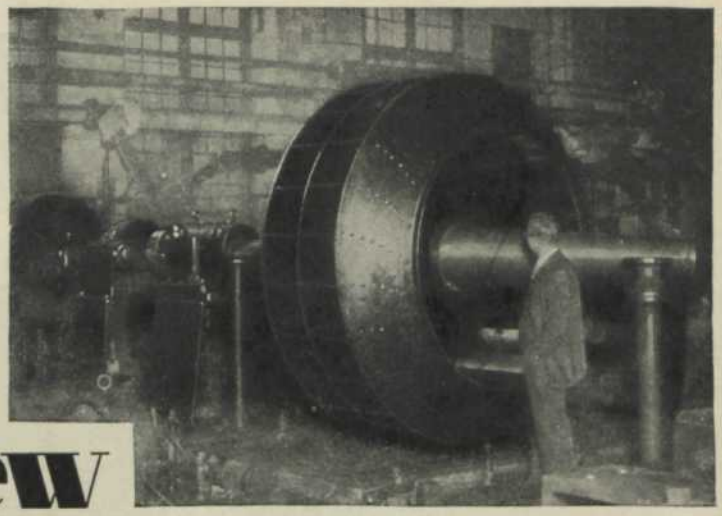
Yet their rivals had systems. It is not possible to handle freight over disunited roads with the certainty and economy that is possible on a system. American railroad men have proved that over and over.

I am purposely avoiding mention of the lesser roads which, as stated in the Van Sweringen application to the Interstate Commerce Commission for permission to create a fourth system in the East, "are proposed to be controlled under lease or by purchase of stock or in any other manner not involving the consolidation of such carriers into a single system of ownership" as set forth in the Interstate Commerce Act and other applicable provisions of law for the reason previously stated.

But it should be stated here that the Van Sweringens have fortified themselves in every enterprise in which they are interested by the possession of actual control.

No overnight ousting can ever be the case with them.

In these days of low inventories the customer of a railroad must be able to depend on getting his freight at the hour promised. His warehouses are no



a New World's Champion!

. . . this is the most powerful induced draft fan ever built

—operating at 18" static pressure—22,500 feet per minute rim speed—requiring an 1800 H. P. motor to drive it.

It is a Sturtevant "Turbovane" with *vane control* designed for the Alabama Power Company, Birmingham, Ala., for its New Gorgas Station at High Level, Ala. Variations in volume and pressure are controlled by movable vanes located in the spiral inlet boxes.

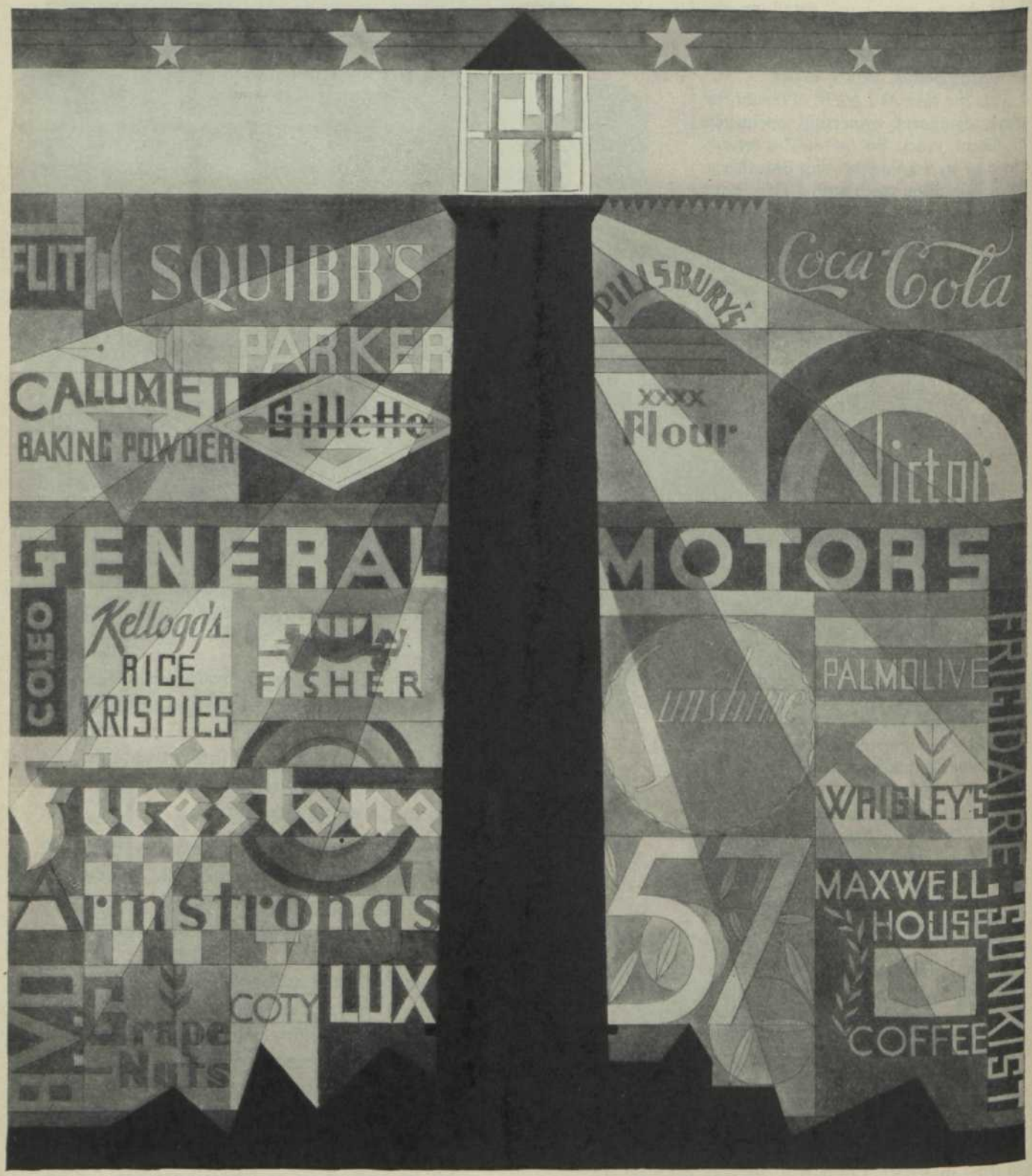
It's a world champion on speed too . . . the 98 inch wheel has a rim speed of 22,500 feet per minute . . . over 250 miles per hour! The stresses are tremendous. Only the most exacting selection of alloy steel and long experience with the most modern equipment for heat treatment can put *reliability* into a fan of this character. Every joint is hand riveted as painstakingly as the finest craftsmen can do it. Welding is *not* used on "Turbovane" wheels!

Equal care is used in both static and running balances. The illustration above shows this fan with its own shaft and bearing receiving its running balance on our test plate.

B. F. STURTEVANT CO., *Hyde Park,* BOSTON, MASS.
Plants at: Berkeley, Cal. • Camden, N. J. • Framingham, Mass. Galt, Ontario • Hyde Park, Mass. • Sturtevant, Wis.
Offices in Principal Cities

Sturtevant
REG. U.S. PAT. OFF.
HEATING-VENTILATING AND POWER PLANT EQUIPMENT

When writing to B. F. STURTEVANT COMPANY *please mention Nation's Business*



SCRIPPS

NEW YORK, *Telegram* : CLEVELAND, *Press* : BALTIMORE, *Post* : PITTSBURGH, *Press* : SAN FRANCISCO, *News* : WASHINGTON, *News* : CINCINNATI, *Post*
COVINGTON, *Kentucky Post* : (*Kentucky Edition of Cincinnati Post*) : BUFFALO, *Times* : INDIANAPOLIS, *Times* : DENVER, *Rocky Mt. News* : TOLEDO, *News-Bee*
COLUMBUS, *Citizen* : AKRON, *Times-Press* : BIRMINGHAM, *Post* : MEMPHIS, *Press-Scimitar* : HOUSTON, *Press* : YOUNGSTOWN, *Telegram* : FORT WORTH, *Press*
OKLAHOMA CITY, *News* : KNOXVILLE, *News-Sentinel* : EL PASO, *Post* : SAN DIEGO, *Sun* : EVANSVILLE, *Press* : ALBUQUERQUE, *New Mexico State Tribune*

National Advertising Dept., *Stuart S. Schuyler*, Director, 230 Park Ave., New York · Chicago · San Francisco · Detroit · Los Angeles · Atlanta · Phila. · Buffalo · Dallas

Giving *Light* to the Man *who guides a national Advertising campaign*

This morning a typical housewife telephoned the day's order to the grocer . . . *a package of Post Toasties, a can of Heinz Baked Beans, a dozen cakes of Palmolive and a box of Lux were some of the items on the list.*

But she didn't pause to ask "Are these products first-class today?" "Are they as good in your store as in the store up in Maine, where I bought them last summer?"

For one of the greatest services the national advertiser has rendered the public is the assurance of unvarying quality and value he has put into his trade-marked goods.

No matter *when* or *where* purchased, they're always the same in *grade* and *character*.

BUT does the advertiser enjoy the advantages of his own formula in buying advertising?

Can he buy his advertising as he sells his product . . . on an assurance of known and uniform quality?

In purchasing newspaper space, can he select a newspaper circulation in one city matching a newspaper circulation in another city? . . .

—Alike as to character of reader, degree of reader-interest and confidence, average reader-purchasing power, closeness of reader-residence to the city trading area, and lowness of advertising cost, in relation to responsive market coverage?

He CAN . . . in the 25 SCRIPPS-HOWARD Newspapers published in 25 cities.

Obviously, SCRIPPS-HOWARD Newspapers do not match each other in size of circulation. That size is regulated by the size of their respective communities and each city's degree of interest in clean, accurate and public-spirited newspaper service.

Nor are Scripps-Howard circulations in every case the largest in their respective cities.

But Scripps-Howard circulations, thousand for thousand, are alike in character and in dollar for dollar value given to the advertiser.

. . .

For each one thousand Scripps-Howard readers an advertiser pays to reach, from San Diego to New York, he gets the same high degree of concentration in the trading area.

—The same economy and equality of advertising rate of cost for city coverage.

—The same freedom from scatteration to points remote from the trading limits.

—The same type of reader-interest attracted by live, efficient and accurate news-treatment.

—The same degree of reader-confidence generated by fearless and independent editorial policies.

—The same high net worth of circulation assured by freedom from free offers, premium schemes and other circulation hypodermics.

. . .

Because communities differ, SCRIPPS-HOWARD Newspapers are not standardized as to news content and editorial issues . . . though they are alike in their completeness of news resources and in their common independence, freedom of action, tolerance and fair dealing.

But their business departments are run on the uniform and standard practice of giving the advertiser the highest volume of influential and profit-paying trading-area circulation, at the lowest feasible cost.

Thus, the values in Scripps-Howard circulation, whether purchased through an individual newspaper unit or by the group, are *as known, as uniform, as unvarying as are the values in the advertiser's own package.*

HOWARD NEWSPAPERS



MEMBERS OF THE AUDIT BUREAU OF CIRCULATIONS OF THE UNITED PRESS . . . AND OF MEDIA RECORDS, INC.

QUALITY THAT WINS AWARDS



The Equitable Trust Building chosen—by famous architects as the outstanding building achievement in New York for 1928—is equipped throughout with Circle A Partitions.

Thus quality was combined with quality—for so splendid was the workmanship and appearance of the Circle A Partitions that they too were judged the finest for 1928.

Nothing can surpass the rich dignity of these panelled walls of polished wood. Sectional and movable, they allow new office layouts almost overnight. (Many of the largest industrial concerns in the country use Circle A Partitions for their offices.) Some of the industrial users are: Pratt-Whitney, Westinghouse, Timken, Bell Telephone, Warner Gear, General Electric, etc. Write for details.

CIRCLE A PRODUCTS CORPORATION
658 South 25th Street, Newcastle, Indiana
New York Office:
Farmers Loan & Trust Bldg.
475 Fifth Ave., New York

CIRCLE A PARTITIONS
Sectional—Movable

When writing please mention Nation's Business

longer filled with parts on which interest and depreciation prey.

The long inventory is one of the evils against which President Hoover inveighed when he was Secretary of Commerce.

A road should control its freight

IT HELPED bring about the depression after the war. If freight travels on a rival's line the responsible road lacks control. O. P. Van Sweringen saw the Chesapeake & Ohio, Hocking Valley, Nickel Plate, Erie and Pere Marquette as the natural and logical nucleus of a fourth major railway system in eastern territory.

The three eastern systems are the Pennsylvania, the New York Central and the Baltimore & Ohio. The conferences of the heads of the three systems with the Van Sweringen brothers began in 1925 and after quite a long period of quiescence were taken up again in 1927.

In the end a plan was recommended to the Interstate Commerce Commission by the heads of the New York Central, the Baltimore & Ohio, and the proposed Nickel Plate or fourth system, by which an allocation of carriers was proposed which would have on the basis of 1923 a combined mileage of 58,500, a combined property investment of $8,721,000,000, total operating revenues of $2,878,600,000 and total net railway operating income of $444,500,000.

A few necessary figures

A MATHEMATICAL division of these figures by four produces mileages of 14,625, property investment of $2,180,000,000, total operating revenues of $720,000,000 and total net railway operating income of $111,100,000.

These figures are dull but necessary, for the recommended plan produces the following:

	Mileage	*Investment (in millions)*	*Revenues (in millions)*	*Income (in millions)*	*Rate of return*
Penn.	16,237	$2,726	$936	$116	4.27
N. Y. C.	15,745	2,346	832.1	145	6.19
B. & O.	13,465	1,843	575	95.5	5.18
NKP	13,056	1,806	535	88	4.87

The principal ports to be served by the four systems in the recommended plan would be:

Pennsylvania—New York, Philadelphia, Baltimore and Norfolk.

New York Central—New York and Boston.

Baltimore & Ohio—New York, Philadelphia and Baltimore.

Nickel Plate—New York and Hampton Roads.

The Pennsylvania refused to agree to this allocation and the Interstate Commerce Commission did not hold hearing on the plan. Since then the complexion has changed from time to time.

The figures revealed in the preceding tables are excuse enough, if one were needed, for more than conservatism in treating the situation.

Broadly speaking the Pennsylvania and New York Central systems are rounded out as they stand, whereas the Baltimore & Ohio and the Nickel Plate—more generally known as the Chesapeake & Ohio since the acquisition of the latter road by the Van Sweringens—need further unification in the interest of economy and efficiency.

An issue that must be met

EVENTUALLY the problem must be solved, for Congress has refused to relieve the Interstate Commerce Commission of the mandatory clause in the Interstate Commerce Act, by the terms of which the duty of finding a solution was placed squarely on its shoulders. The day-by-day history of the struggle is written in the newspapers.

Hardly a month goes by that some change is not proposed by an interested party. But this is a departure from the original effort, which is in some measure to tell the story of two most remarkable men.

The Van Sweringens have no objection to the fullest discussion of their acts, but they have refused to assent to even the slightest attempt whatsoever to throw light upon their interesting personalities.

I might tell a score or more of stories about these two men. They paid a $2,000,000 legal bill in the original Nickel Plate suit which might have been saddled on the stockholders. In one operation they paid $100 for Chesapeake & Ohio stock and sold it back to the railroad for $83. The C. & O. stock was worth $225 sometime later. They sold their own Pere Marquette stock to the Chesapeake & Ohio for 69 when the market was 146.

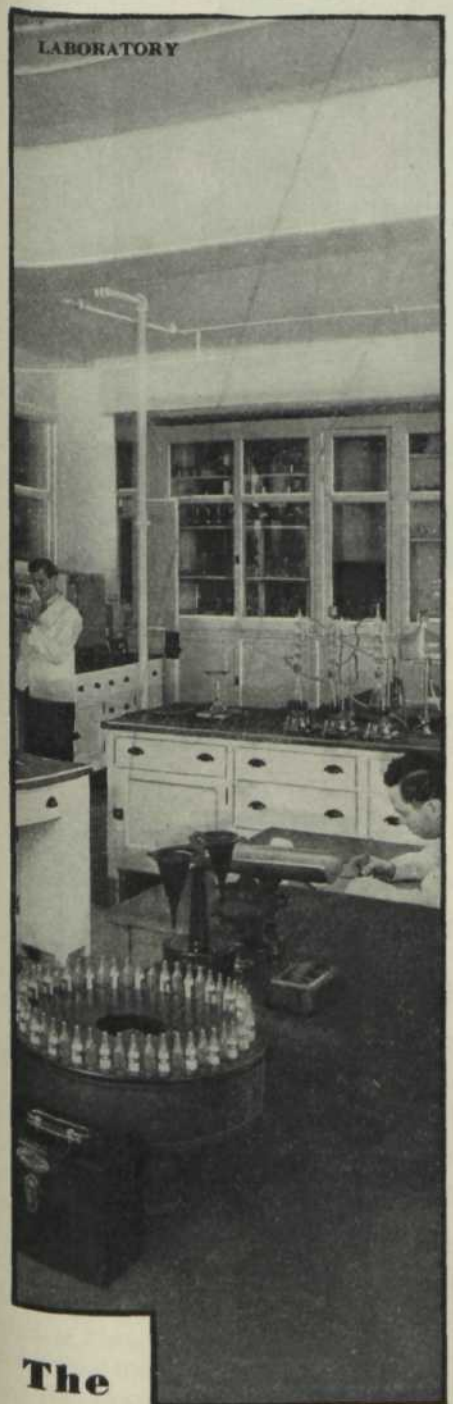
I can tell these things because they are matter of public record. Doubtless more interesting stories about the Van Sweringens could be recounted, if only the brothers would consent to talk about themselves for publication. A man has a right, I feel, to preserve the privacy of his inner life. That right is freely granted to Oris P. and Mantis J. Van Sweringen. Freely, I said, but not cheerfully.

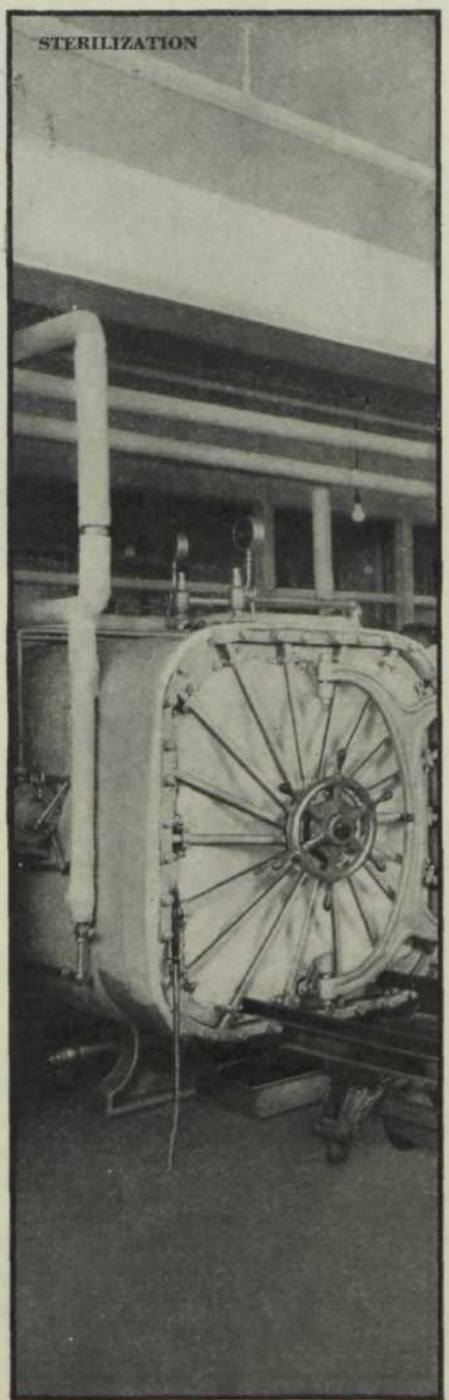
* *White paints have the highest light reflecting factor.*

WHITE PAINT SANITATION

The Bauer & Black Division of The Kendall Company finds "Cleanliness—freedom from contamination of any kind—is essential in everything we produce. Preparation in sanitary, well painted departments is necessary. White as the gauzes themselves are the walls and ceilings of our various sections." Present day white and light tint paints—paints containing the zinc pigments, Zinc Oxide and "Albalith" Lithopone properly combined with the correct vehicle are more than sanitation assets. Their high light reflecting efficiency* makes them valuable aids to better workmanship and better products. The New Jersey Zinc Company, manufacturers of Zinc Oxide and "Albalith" Lithopone, leading zinc pigments in quality paints, believes further information on these pigments and the paints that contain them will be of profit to you. Write to The New Jersey Zinc Company, 160 Front Street, New York City.

THE BAUER & BLACK DIVISION OF THE KENDALL COMPANY



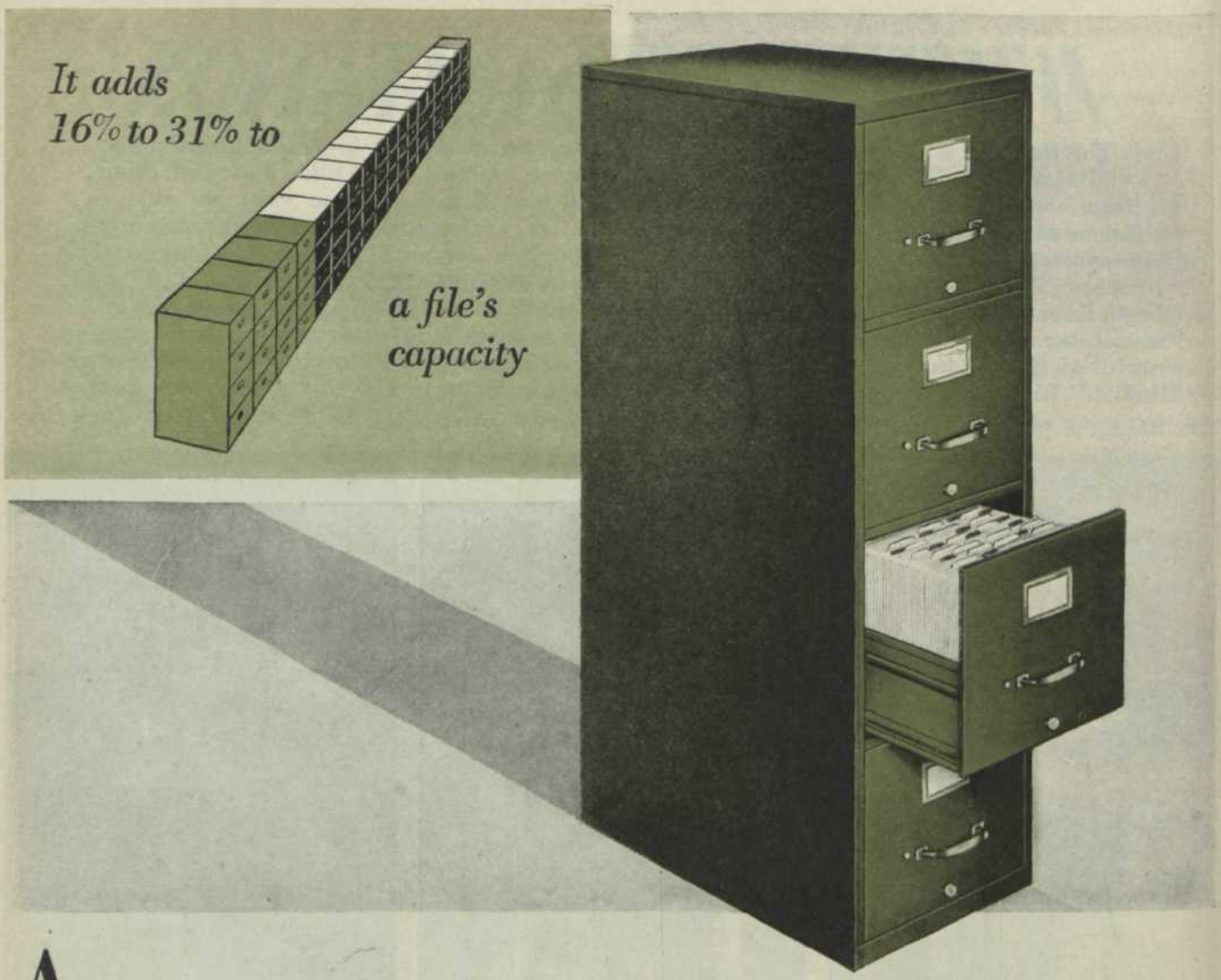




The New Jersey Zinc Co's. Zinc Oxide and "Albalith" Lithopone

ZINC PIGMENTS IN PAINT

When writing to THE NEW JERSEY ZINC COMPANY *please mention Nation's Business*



ANNOUNCING REMINGTON RAND'S NEW ARISTOCRAT IV FILING CABINETS

NOW comes the Aristocrat IV—the most spacious filing cabinet that ever cut a rent bill.

Now comes a new feather-touch sliding drawer.

Now comes a new steel construction . . . electric spot-welded . . . as in a battleship . . . not a nut, bolt, screw or rivet in it.

Now comes a new and simple beauty. These cabinets, gentlemen, are more than efficient pieces of equipment—they are *furniture.*

Now comes an ingenious system of substitute drawers, whereby a single cabinet might house every type of record you may use.

And yet—considering savings in space, time and equipment—the Aristocrat IV is the biggest bargain on the market.

If you want more housing for records, or if you think you need more floor space, let a Remington Rand man show you this new cabinet.

Or, better still, let him submit a blue-print showing the most economical arrangement of your office, based on a study of present space available, equipment on hand, material to be housed, quick reference, convenience of your staff, light and air.

Just call the nearest Remington Rand branch, or write to the main office at Buffalo, N. Y. for a brochure which gives complete information.

REMINGTON · DALTON
LIBRARY BUREAU
BAKER-VAWTER

Remington Rand
BUSINESS SERVICE
BUFFALO, NEW YORK

KARDEX · · RAND
SAFE CABINET
KALAMAZOO

When writing or phoning to Remington Rand Business Service *please mention Nation's Business*

When Bureaucracy Ruled Business

By PAUL H. HAYWARD

AS A MODERN business man you perhaps are wont to declare that government interference with business is one of the pressing business problems of the day. But is that problem really so modern after all?

Let's look into the matter, adopting a bit of byplay by way of enlivening the task.

First, take your pencil, walk to your wall calendar, and strike the figure 1 from 1929. Figuratively—no pun intended—that transforms you into a business man of 929 A. D., a candlemaker, let us say, of ancient Constantinople.

Having thus nimbly spanned the space of a thousand years and set yourself up as a go-getting candlemaker, it will be no task at all to further imagine that, in the course of your daily endeavors at making bigger and better candles, you are approached by a candlestick salesman. This chap doffs his derby, knocks the ashes off his cigar, and turns loose a high-pressure sales talk. His firm is overstocked, must reduce inventory, has to have some ready cash—soon you gather that he's offering you a swell lot of candlesticks at rock-bottom prices.

Horizontal Trusts? No!

A CHANCE to cash in, he says. Great chance to take on an allied line of stuff that ought to go like hot cakes with your own product.

Do you sign on the dotted line?

Emphatically you do not—not if you're smart.

Why? Well, the reason is contained in Section 2, Article XI, "Book of the Prefect." This Book of the Prefect is a compilation of the government's ordinances that regulate the trades of the time. No Byzantine business man such as yourself can afford to be without it. Bidding the salesman wait, you thumb your well-worn copy until you arrive at the section mentioned above. You read:

"The candlemakers must not enter upon or practise any other trade, but shall carry on their own exclusively. Those who do otherwise shall be beaten and shorn, and shall suffer confiscation."

Having read, you act. You leap across your desk, seize this low fellow by the slack of his toga and give him the bum's rush across your threshold. You hurl his sample case after him, dust your hands and go back to your candlemaking. The incident is closed. Selling candlesticks is manifestly not for such as you. The Emperor himself has proclaimed it through his representative, the Prefect of the City, and this Book of the Prefect.

This Prefect, A. E. R. Boak writes in the *Journal of Economic and Business History*, was the representative of the Byzantine state in that state's relations with the tenth-century gilds. An arch bureaucrat, he exercised authority over all the gilds, the citizens, and the other residents of Constantinople.

The Book of the Prefect, the text of which was discovered in a fourteenth-century paper manuscript in the Library at Geneva by Prof. Jules Nicole, reveals the Prefect's connection with the gilds. We find that the Prefect determined the reception of new members, supervised trade and manufactures, controlled imports and exports, fixed the location and character of shops, supervised weights, measures and coins, regulated prices, and controlled the activities of foreign merchants. Likewise we learn, through the example cited and others that will be mentioned, that the Prefect's regulations were not to be taken lightly.

These regulations, as outlined in the Book of the Prefect, are of interest from standpoints of both history and economics. As Boak writes, they shed "a flood of light upon the scope and character of Byzantine trade, industry and commerce" and show us "the organizations of craftsmen and merchants of the time."

Moreover, in this day when the relations of our own Government and business are vital topics of discussion, this ancient manuscript, to quote Boak again, "enables us to study the workings of an economic system in which activities of the individual have been entirely subordinated to the interests of the state."

Let us take a further look, then, at some of these regulations, first completing our consideration of those dealing with the ancient craft of candlemaking. Section 1 of Article XI reveals, for example, the extent of state regulation of this craft. It reads:

Chandlers strictly regulated

"THOSE who practise the trade of making wax candles must carry on their business privately in their own shops and must not set up sales tables along the streets in unsuitable places through the agency of either slaves or apprentices. They shall not import secretly any wax whether raw or prepared. They shall establish their shops at a distance of 30 fathoms apart, except those in the church of St. Sophia."

Unfair trade practices were scrutinized even in that day and craft, and somewhat rigorous measures were taken for their suppression, as we learn from Section 5 of the same Article, which provides:

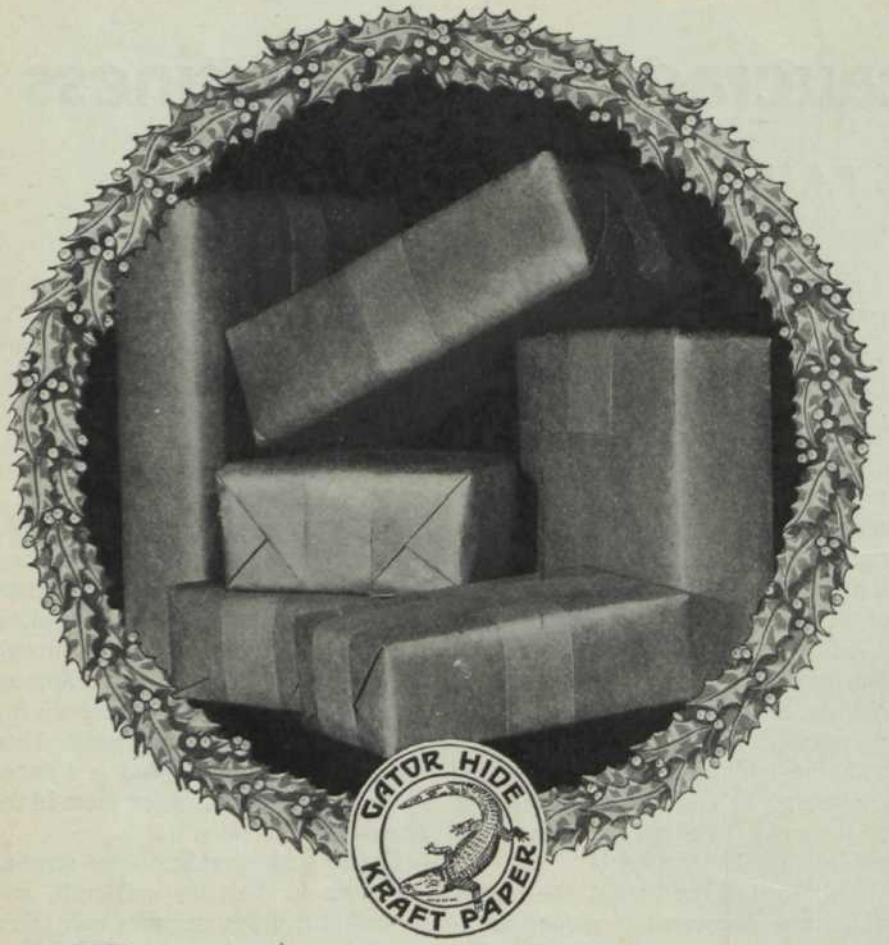
"Any candlemaker shall himself be liable to punishment if he fails to inform the Prefect of those who fraudulently alter the size of candles by heating them, so that they may be flogged and expelled from the trade."

Jewelers, too, were subject to the Prefect's orders, and likewise had to stick to their lasts, so to speak. Section 1 of Article II, which deals with that craft, recites:

"We ordain that the jewelers may, if any one invites them, buy the things that pertain to them, such as gold, silver, pearls, or precious stones; but not bronze and woven linens or any other materials which others should purchase rather than they . . ."

Anything aproaching a monopoly in raw silk was prevented by the ordinance which provided that "if a rich dealer in raw silk happens to have bought a quantity from foreigners, he shall sell it to his poorer colleagues at a profit of one ounce (about 8.5 per cent) on the *nomisma*."

A silk spinner was forbidden to retail raw silk and further had to guard against "showing himself to be gossiping, a boaster, troublesome, or nosiy" on pain of being "expelled from the



Let GATOR-HIDE *take the Goods Home Safely!*

Wrap the goods in firm-fibred Gator-Hide for protection against wear and tear and careless handling; let strong, dependable Gator-Hide complete your service, and your customers' satisfaction.

ANOTHER CERTIFIED PRODUCT OF

INTERNATIONAL PAPER COMPANY

(SOUTHERN DIVISION)

MAIN SALES OFFICE: 100 East 42nd Street, New York, N. Y.

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corporation with blows and insults."

Victualers had more latitude than perhaps any other class of merchants in the variety of goods they could handle—though certainly even their shops would bear no resemblance to the modern druggists' in point of diversification. In addition to ordinary foods, victualers were permitted to sell "pitch, cedar resin, hemp, flax, plaster, pottery vessels, bottles, nails, and all other things sold by a bar-balance and not by twin scales.

A closing hour of 7 p. m. was forced upon the tavernkeepers "in order to prevent the habitual daytime patrons, if they have the opportunity of returning at night, from becoming intoxicated and shamelessly engaging in fights."

The crowning regulations of all, however, were those enforced upon the perfume dealers. Each of these, the Prefect ordained, "shall have his own station and not try to overreach his fellows." Further, "they shall watch one another to prevent any from lowering their prices or selling unreasonably small quantities, or keeping in stock victualers' wares or any other sort of common goods, for an unpleasant odor does not harmonize with a pleasant one.

"They shall place their show tables with the containers in a line extending from the sacred image of Christ our Lord which is by the Chalce up to the Milestone, so that these may send forth a savory aroma befitting the image and make pleasant the porches of the palace.

"All who are caught disobeying these ordinances shall be scourged, shorn, and banished."

They have modern parallels

AN ABSURD set of regulations, you say, reverting to your modern role. But certainly some of those regulations must have a familiar ring to you. Altered only slightly they might fit into the platforms of some of our modern advocates of more government in business.

How well then, we may pertinently inquire, did this elaborate system of government supervision in ancient Constantinople, and which is only briefly sketched here, work?

On that point history is not clear. This much we know, however, that Constantinople in the tenth century was the seat of a dwindling empire, afflicted with a hardening of the arteries of trade. We may suspect, even though we may not actually know, that excessive governmental regulation of business was a contributing cause of her economic and political decline.



THE Merchandise Mart will place a comprehensive, permanent display of modern merchandise in manufacturers' salesrooms within a night's journey by rail and *four hours by air* from a territory embracing 47% of the country's population, 70% of its wholesale sales, and 65% of its retail outlets.

Of eighteen floors and a central tower of six additional floors, the building will comprise 4,000,000 square feet of floor space, or approximately 200,000 square feet to the floor.

CONCENTRATE AT CHICAGO



TODAY'S vital message to America's makers and wholesale sellers of general merchandise is a message founded solidly upon today's economic needs. It says unequivocally, tersely, with complete authority, *Concentrate at Chicago!*

Concentrate your sales activities here because here will be attracted the merchant buying power of the nation. Scattered sales offices and sales organizations are no longer feasible. Concentrate at Chicago because Chicago, not merely today's great center but tomorrow's greater center, holds the fullest measure of success for you.

Concentrate *in The Merchandise Mart* at Chicago! Join the others of your industry who will be found participating in the benefits of the New Economy—in modern, well-lighted, practical sales and display rooms along the broad corridors of the Colossus of Marketplaces.

Join them in this wholesale city under one roof so that your customers may have the economical advantage of shopping leisurely, deliberately, on a single floor. Experience the frequent visit of merchants who will come to market oftener, spend less time, buy more, and have more time left for selling at the store.

Join the leaders in your industry in the benefits of a merger of efforts—stand side to side with your allies and note a new moral tone that reaches and affects everyone.

The trade will expect to find you there—on *your* floor at The Merchandise Mart. Blue prints of desirable sales, display and flexible storage space should be requested now. Occupancy early in 1930. Address,

THE MERCHANDISE MART

215 WEST WACKER DRIVE, CHICAGO



SPEED!

SPEED in your record-keeping, that's what you want. Speed that starts at the point of contact with the customer. It's a foremost element in the modern program of efficiency—speed that sacrifices no valuable detail.

Exactly fitting the need, logically fitting your business, the famed and popular Egry COM-PAK Autographic Register system is at your service . . . Ready to perform rapidly, unerringly; to stop leaks that may now be disturbing you; to *certify* every transaction when it takes place.

Two to six copies are made at one time on the Egry. You get as absolute and complete a check on your business as if you attended each detail. And you get it with 100% accuracy . . . A copy goes into the "safe"—into the locked chamber—at the time of the transaction.

Use the Egry COM-PAK Autographic Register system to record:

Sales — Deliveries
Credits — Shipments
Exchanges — Purchases
Jobs in work — Shop costs
Labor time records
Stocks of goods — Inventories
Material requisitioned
Money received or paid on account
Cash balances

The Egry is built for long and faithful service. It is very simple to operate. It is ever ready.

It will fit into your business. And it will fit economically. Let us explain—without the slightest obligation on your part—how a simple, inexpensive system can be built around the Egry to save you money and cut out losses in time and money. Write for the facts.

THE EGRY REGISTER COMPANY
Dayton, Ohio

EGRY
COM-PAK
AUTOGRAPHIC REGISTER

Radio Dons Its Working Clothes

(Continued from page 51)

tending across the Atlantic and the Pacific, as well as to Central and South America.

It is not a selfish network for the sole benefit of America. Many of the smaller nations have found freedom of communication through the RCA World-Wide Radio. Poland, for instance, as one of its first official acts as a reborn nation, invited American radio engineers to build a powerful transoceanic radio station at Warsaw, which now maintains direct communication with New York City and other centers. So radio has donned the drab garb of the everyday worker.

Speed is unlimited by wires

RADIO, as used in marine and transoceanic communications, is a constant, efficient and supremely practical medium of communication. Radio communication is handled over "circuits," which means that direct contact is established between two points. Once the contact is established, the speed of traffic over the circuit is limited only by the terminal facilities. The ethereal medium, unlike the usual submarine cable, has virtually no speed limit. Today, over the latest short-wave circuits, traffic speeds of 200 words and more are obtained.

Radio also has a flexibility impossible in other forms of communication. Thus operating equipment may be permanently assigned to important circuits while minor circuits are allowed to tie up equipment only for a limited time. This makes it possible to establish communication between many points which, under an inflexible system, could not be served economically.

The many transmitters employed in our world-wide radio system are scattered about with a view to the best operating conditions. On the other hand, the control of those transmitters is centered in the traffic offices in New York and San Francisco.

Here radiograms are typed on the perforator keyboards, and transformed into perforated patterns in a paper tape. The tape is whirled through an automatic transmitter, and its tiny perforations cause the formation of dots and dashes. The signals flash over direct wires to distant transmitters at Rocky Point on Long Island, at Marion on the south shore of Massachusetts, or at New Brunswick or Tuckerton in New Jersey, in the case of the New York traffic office.

Low rates recently introduced for radiogram letters and deferred radiograms have taken transoceanic radio service out of the luxury class. Nevertheless, an analysis of international radio traffic indicates that social communications comprise less than ten per cent of the total. The bulk is devoted to commercial intercourse.

Press dispatches represent some 15 per cent. About five per cent takes the form of stock quotations, market reports and other commercial and financial news. Our Government patronizes the service to the extent of ten per cent or better, with the State Department keeping in touch with embassies and consulates abroad, and with the Department of Commerce maintaining an extensive commercial news-gathering organization throughout the world.

The shipping companies are large users of transoceanic radio service, mainly for arranging reservations, reporting ship movements, ordering fuel and food, and other business details.

About 60 per cent of the trans-Atlantic and Latin-American traffic is in code, while 90 per cent of the trans-Pacific traffic is in code because of the higher rates obtaining on the Pacific side.

The high speed at which radiograms are transmitted precludes the possibility of their interception by amateurs or unauthorized parties.

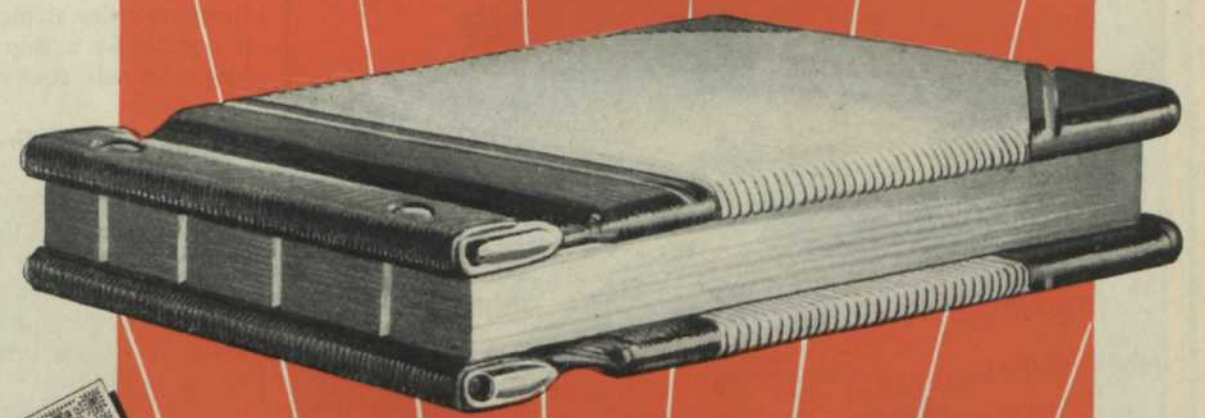
Traffic volume is growing

SOME idea of the volume of traffic handled by America's world-wide radio service may be gained from the fact that the New York RCA office has a staff of 275 operators. In the San Francisco office there are 30 operators. Some 160 messenger boys deliver radiograms in New York City. Direct telephone and telegraph lines are maintained for the largest users of the service.

From the huge and costly Alexanderson alternators, our radio technique has gone to the short-wave transmitter. Today, a large part of the traffic is handled by compact, simple, moderate-cost vacuum tube transmitters.

With short waves, it is also possible to employ the beam system, or directed waves, so that the signals are aimed at the distant receiver with as much precision as pointing a searchlight. This

SAVES In Four Ways





Lifetime Mechanism guaranteed by a bond



THE BINDER with POSTS that DISAPPEAR

FLEXI-POST Binders save *time* because they are faster and easier to operate.

A few turns of the key release the compression and open up two inches of finger room for easy adding or removing of sheets.

Non-protruding posts save vault space and prevent scratched desks.

Unlimited capacity saves money, since fewer binders are needed for given volume of work.

Flexi-Post Binders last longer — the lifetime guaranty on the mechanism proves that.

Let your local dealer demonstrate.
Mail coupon for booklet.

STATIONERS LOOSE LEAF CO., *Milwaukee, Wis.*

FLEXI-POST

REG. U.S. PAT. OFF.

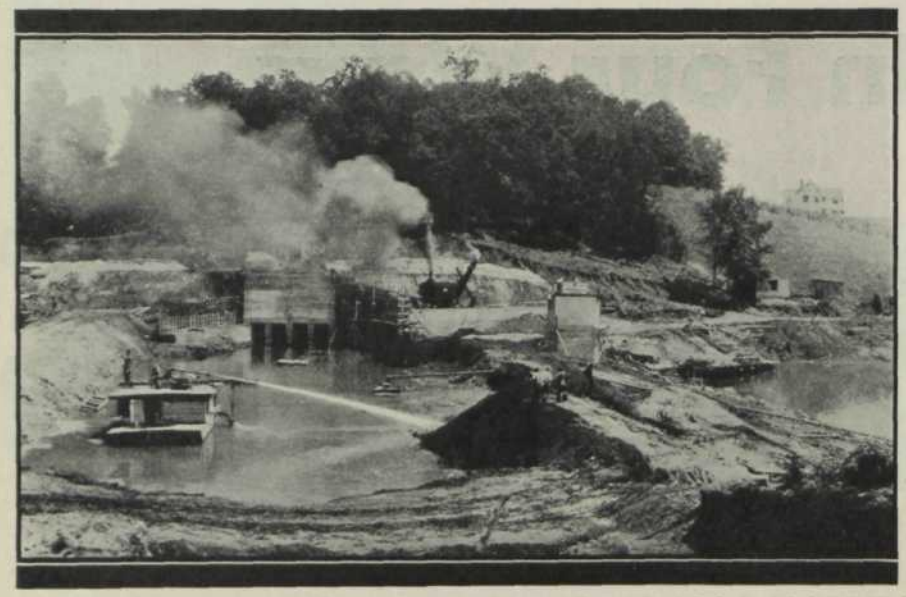
The Guaranteed Binder – a Unit of the FAULTLESS Line

STATIONERS LOOSE LEAF CO., Dept. A-12, Milwaukee, Wis.
Kindly send free copy of Flexi-Post booklet.

Name.....

Address.....

PLANNING..
That's what did it!



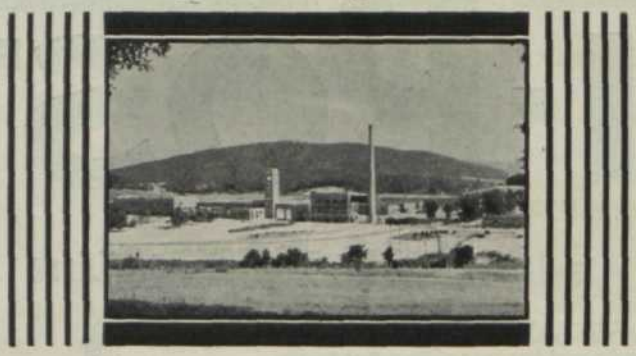
A DAM that impounds half a billion gallons of water was just a detail in the construction of the American Enka Corporation's $10,000,000 rayon plant built by Ferguson engineers at Asheville, N. C.

Production of rayon started exactly 9 months after Ferguson engineers first began drawings for the huge development.

Fast work—but no forced schedules or rush construction. On this job—as on every Ferguson job—pre-planning did it—with perfect teamwork among Ferguson engineers, Ferguson architects and Ferguson construction men, working as a unit for economy of the owner's time and money.

If you are interested in building and building problems, the Ferguson "Cross Section"—published monthly, should be of real value to you. Each issue contains a technical article dealing with some interesting phase of construction work. A request on your letterhead will bring this publication to you gratis.

THE H. K. FERGUSON COMPANY
Hanna Building · Phone CHerry 5870 · Cleveland, Ohio



Ferguson
ENGINEERS

When writing to The H. K. Ferguson Company *please mention Nation's Business*

results in greater efficiency and a further reduction of atmospheric interference.

Radio has done much for the safety of ocean travelers. The average ocean greyhound handles more than a thousand radiograms on a single trip, exclusive of press dispatches, weather reports and ship's business. The usual ship's transmitter now has a range of 500 miles in day-light, and several thousand miles at night. No longer is it possible for a ship to be "lost," so long as its radio equipment is operating.

Radio finds direction, too

IN THE radio direction finder, marine radio has presented the navigator with the greatest aid since the Chinese gave us the magnetic compass. The radio direction finder makes it possible to locate the transmitting source of intercepted radio signals. A ship's exact position may be determined by means of its signals as intercepted by others equipped with a radio direction finder.

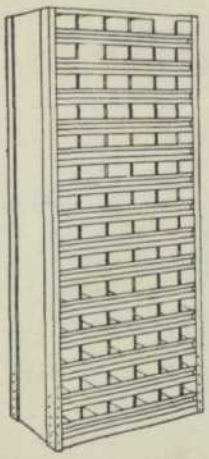
Radio beacons, or automatic transmitters along our coasts and installed aboard lightships, permit the navigator to take his bearings on known points, irrespective of darkness or fog.

Many thrilling rescues have been effected by means of the radio direction finder, but its greatest value is doubtless in the hundreds of thousands of hours saved by shipping each year because of the positive navigation which it assures.

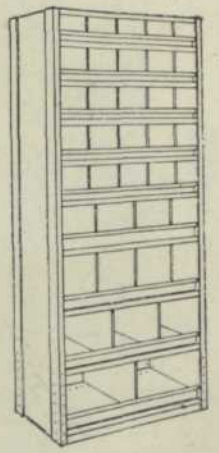
From marine radio to aviation radio is but a step. Today, with a radio equipment weighing a trifle over a hundred pounds and occupying a few cubic feet of space, it is possible for the airman and his passengers to communicate by telegraph or telephone over a considerable distance. Vital information regarding the weather is ever at the disposal of the airman whose helmet contains radio earphones. Automatic direction finders permit him to take bearings on radio beacons and to fly a positive course with just as much certainty as the automobile driver on a concrete highway.

It's automatic now

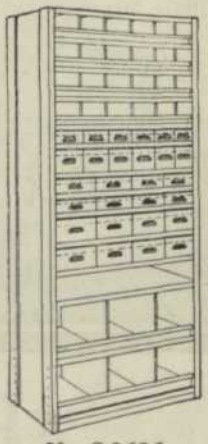
RADIO has evolved from the first crude dots and dashes of slow manual operation to the high-speed automatic operation of today. It has found its voice in the radio telephone, whose greatest application has been in the unique field of mass entertainment known as broadcasting, although the transoceanic radio telephone service which links the telephone systems of Europe and America—and which soon



No. S-3136



No. S-2836



No. S-3636



A new and easier way to plan and order shelving

EVERY business has its problem of "putting things away." And for every problem of this sort, GF Allsteel provides a complete solution ... whether it's a single unit for shelves in an obscure corner, or a complete battery for the stock room.

To simplify the selection and ordering of Shelving, GF has developed a line of Standard Shelving Units which may be purchased as individual pieces of equipment instead of a great many separate parts. A fully illustrated catalog showing thousands of such units is now ready for distribution to business executives. You'll want this helpful book in your files for reference.

And remember—GF Allsteel's planning department will be glad to work on that big, complicated stockroom or store room job for you, offering suggestions and expert advice, entirely gratis.

Send for that GF Allsteel Shelving Unit Book now ... keep it in your files; you never can tell when it might come in handy.

The GF Allsteel Line:

Filing Cabinets · Shelving
Sectional Files · Transfer
Cases · Storage Cabinets
Safes · Document Files · Desks
Tables · Filing Supplies

THE GENERAL FIREPROOFING CO.

Youngstown, Ohio ~ *Canadian Plant, Toronto*

BRANCHES AND DEALERS IN ALL PRINCIPAL CITIES

THE GENERAL FIREPROOFING CO.
Youngstown, Ohio.

Without obligating me in any way, please send me a copy of your new GF Allsteel Shelving Unit Book.

Firm _____

Individual _____

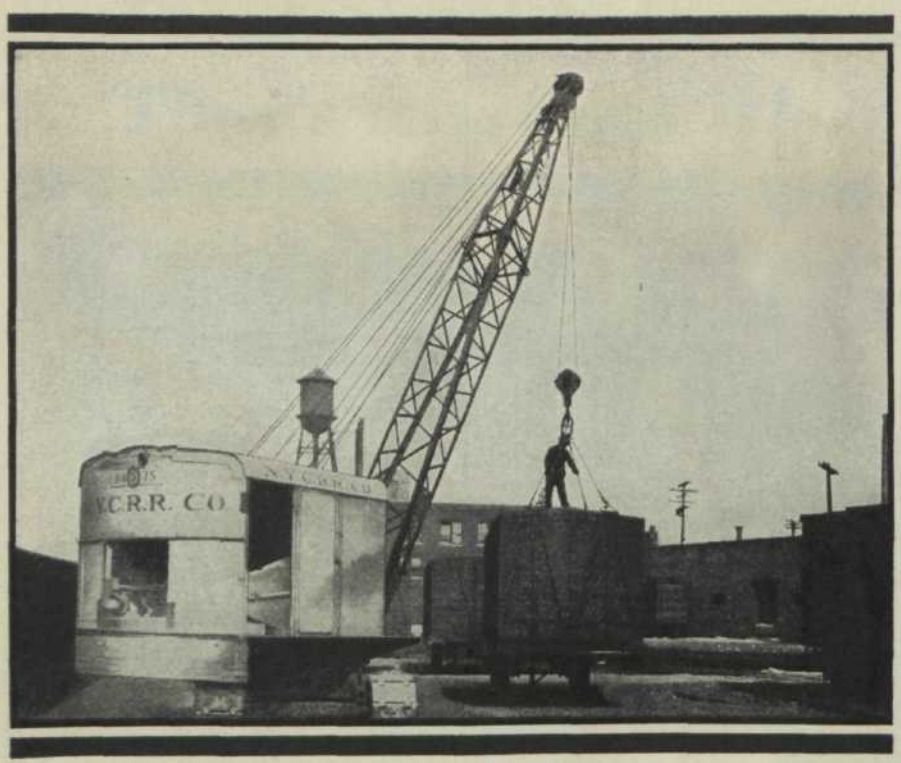
City _____ *State* _____

N.B.807

GF Allsteel

"Serves and Survives"

SHELVING *and* STORAGE EQUIPMENT



IN 1895 Thew built its first machine. For years the company prospered, building power shovels and cranes. Then came the idea of an improved, simplified design—the now famous Center Drive.

The idea took form—four years showed a sales increase of 231%. The fifth year, 1929, will add substantially to even this high figure. Improvements, some extremely important for economical and efficient operation, some developed through sheer pride in achievement, have come with increased sales.

Today it is just good business to investigate the latest Thew machines before you make your final selection of a shovel or crane.

THEW CENTER DRIVE

THE THEW SHOVEL COMPANY · *Lorain, Ohio*
Shovels · Cranes · Draglines · Backdiggers · Locomotive Cranes
Gasoline, Diesel, Electric or Steam Power

THEW
LORAIN
45—¾ YARD
55— 1 YARD
75—1¼ YARD

When writing to THE THEW SHOVEL COMPANY *please mention Nation's Business*

will link the North American and South American continents—is a development not to be overlooked.

And now radio is finding its pen, so to speak, in the facsimile transmitting system already in everyday use. It is possible to send facsimile handwriting, signatures, typewritten messages, greeting cards, fashion sketches, photographs, and other items across the ocean via radio. Many important business deals are speeded up by the facsimile transmission of important signatures, saving five days or more of precious time.

Indeed, with the developments now taking place in facsimile transmission, it is only a matter of time when the dots and dashes of the usual radiogram will be relics of a by-gone age, just as the quill pen has been overshadowed by the more practical, if less romantic, typewriter.

Broadcasting was a handicap

OF BROADCASTING, little need be said. It enters so intimately into the lives of our present generation that it has become commonplace. Suffice it to say that broadcasting represents the capitalization of a serious handicap, and therein lies its true romance.

The original plan was to employ it as a point-to-point communication means,with possible competition for the wire telephone. However, it soon became apparent that secrecy was sadly lacking. Anyone equipped with a simple receiver could readily listen to conversations passing through space.

Then, through the brilliant conception of H. P. Davis, vice president of the Westinghouse Electric & Manufacturing Company, this very party line philosophy was exploited. The radio telephone was made to radiate waves that could be readily tuned in. Programs of general appeal were placed on the air.

International broadcasting is the next phase of broadcasting. We shall soon have a world-wide exchange of programs, so that the talent, the culture, the mental outlook, and the nationalism of all leading countries will become known throughout the world. Boundaries will still further crumble, as this interchange of thought brings about a better international understanding. Perhaps, too, sight may come to join sound in the broadcasting efforts, as television develops beyond the present laboratory stage, and a still better understanding will exist when faces as well as voices will become familiar throughout the world.

KILL FIRE WHILE IT IS YOUNG



Guarding life and property in 90% of American cities

Fire! As from the opening of great furnace doors a red glare of destruction lights the sky!

Then, with a scream of sirens, apparatus thunders by on its mission to save life and property. And —whether the fire's on New York's East Side or on a remote farm— it's 9 to 1 that American-La France motor fire apparatus will answer the alarm.

90% of American Fire Departments are equipped with American-La France apparatus. The choice of men on the firing line has always been American-La France.

For 84 years this company has devoted its efforts to one thing— killing fire. Our products include every recognized type of fire-extinguishing device, from one-quart extinguishers to motor fire apparatus. Our service includes a complete survey of your property, correct installation of protective devices, instruction of your employees, and, if desired, inspection and maintenance service.

In city protection, in guarding homes, stores, factories; in safeguarding motor boats or liners, the leadership of American-La France and Foamite Protection is established.

No matter how large or small your property, this complete service is at your disposal. American-La France and Foamite Corporation, Engineers and Manufacturers, Department D-60, Elmira, N. Y.



American-La France and Foamite Corp., Dept. D-60, Elmira, N. Y.

☐ Please send your booklets on Correct Protection Against Fire.

☐ Have a Fire Protection Engineer call.

Name.....

Company.....

Town or City.....

State.....

AMERICAN-LA FRANCE AND FOAMITE PROTECTION

A Complete Engineering Service

For Extinguishing Fires



An aerial newcomer to ancient China being towed through Hankow to the flying field

Plane Builders Become Exporters

By ANDREW R. BOONE

● THE American aviation industry is embarking on a new and adventurous flight, one that is to carry it deep into foreign markets. As a user of the sky roads, this latest trend is of direct importance to you.

If it succeeds—and there is every evidence that it will—this foreign marketing of planes and parts will do much to cut aviation costs here at home

THE "far-horizon glance" that fiction and feature writers have attributed to all our best aviators is now a characteristic of the aviation companies themselves. The companies are looking to other lands not, as was once the case, as the destinations for endurance hops, but as market places for American aviation equipment.

In fact, my friend, the sales director for an internationally known monoplane manufacturer, assures me that "next year will see competition for foreign markets developed generally."

"At present," he adds, "the Asiatic market seems to be the most logical for immediate development. Of course, the South American market remains to be developed but this, I believe, will be done this winter."

Development of a vast continental market in a single winter is an ambitious program but the industry is thinking in terms of rapid expansion. However, it is more likely than not that several years will pass before aviation exports achieve any great volume.

My friend the sales director agrees with this view. "It is possible," he says, "that the United States can absorb its entire airplane production during the next two years as it will probably take the accessory manufacturers that long to catch up with the plane builders. We expect a shortage of the better known motors, propellers and instruments."

A rich home market

ANOTHER sales manager believes "the real market is at home" and a third declares that "the United States can take care of all the planes built for several years to come."

Just the same the forward-thinking executives of the better class of aviation manufacturing companies are turning their eyes toward foreign markets and it is good business that they should do so. An active and healthy foreign market will do much to stabilize the industry which today, despite a growing interest in aviation, is bound largely by the fetters of the calendar.

Airplane production today is seasonal. Full production throughout the year is impossible. Maximum demand spreads over about three months during the summer when flying conditions most



This Christmas there is something NEW —Waterman's Patrician, a fountain pen so fine, so beautiful, that it is really a piece of personal jewelry.

Forty years of pen-leadership lie behind the beauty of the exquisite Waterman's Patrician set of matching pen and pencil shown below. Tawny streamers shoot through the creamy whiteness of its Onyx barrel. Rich gold bands it.

What other gift so choice for only fifteen dollars? What so prized and desirable? Or so perfect an addition to your own appointments?

Then there are these four other Patrician beauties: Turquoise, Emerald, Nacre, and Jet. All with those writing qualities that can come only from Waterman's HAND-CRAFTING of the pen point, HAND-FINISHING of the precious iridium pen-tip, and the patented Waterman's spoon-feed. These improvements have long made Waterman's the leader, and these features are now at your service in every Waterman's pen from the lowest priced to the Patrician.



NACRE
The pen....$10
The pencil ..$5



JET
The pen..$10
The pencil..$5



EMERALD
The pen....$10
The pencil ..$5

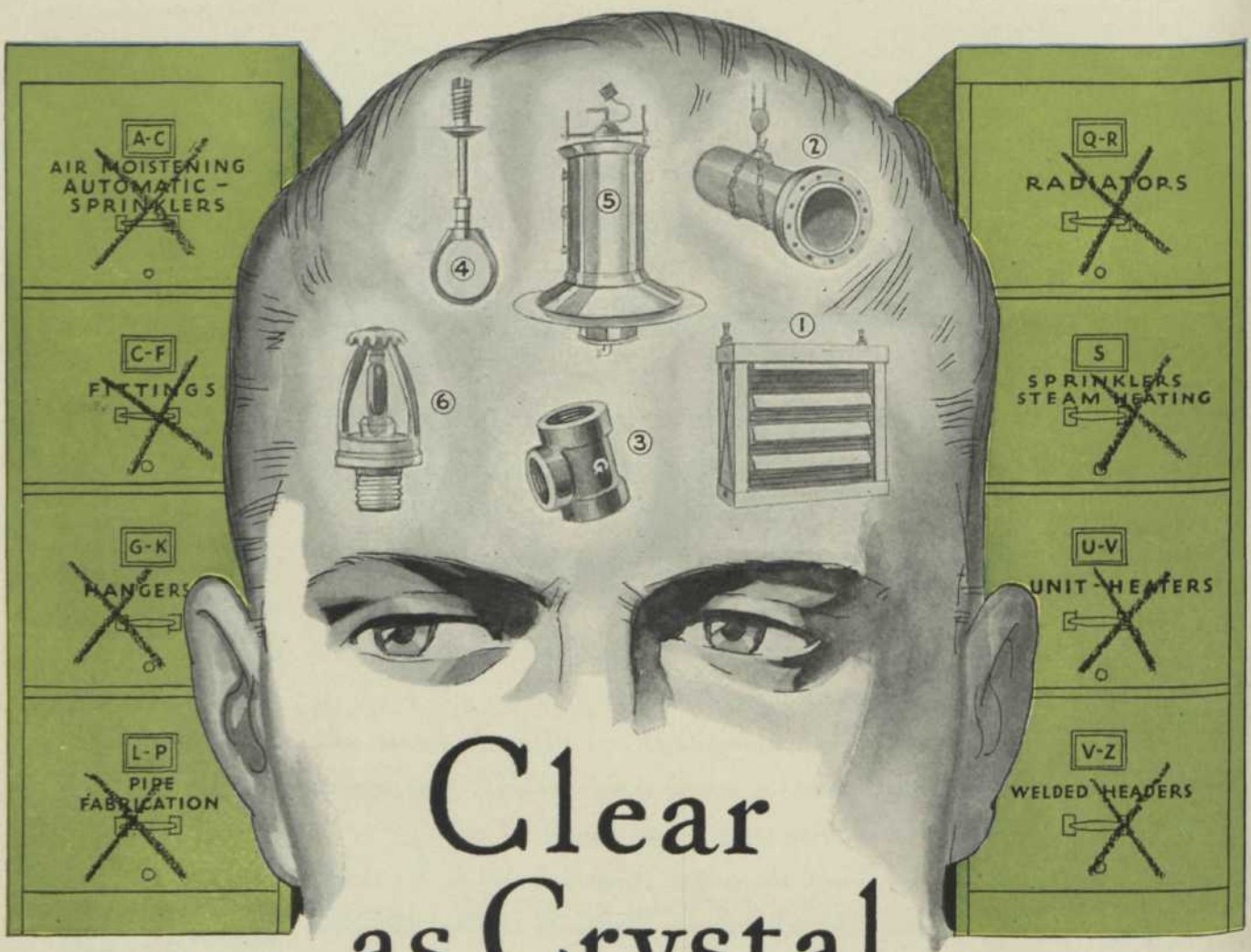


TURQUOISE
The pen....$10
The pencil ..$5



ONYX
The pen....$10
The pencil ..$5

Waterman's



Clear as Crystal

WHENEVER this industrial manager thinks of these six essentials of industrial piping his mind is clear as crystal. From experience he has learned the lesson of judging a product by the producer. He knows the futility of trying to reach a decision by puzzling out mechanical and structural points from data sheets. He recognizes the folly of forming opinions by listening to high powered sales talks.

When it comes to the six products listed below, he closes his data files and becomes "Grinnell minded." He knows Grinnell Company's long record for dependable products and service. New inventions and improvements have convinced him of its progressiveness. Long since he realized that its reputation and great financial responsibility could only have been built on products which adhered to sound standards.

He chooses these industrial piping products by the maker, secure in the knowledge that no product is ever better than the firm that produces it.

1 **Thermolier** the copper unit heater. A better and cheaper means of heating many types of industrial and commercial buildings.

2 **Pipe Fabrications.** Pipe bends, welded headers and the Triple XXX line for super power work.

3 **Pipe Fittings** perfectly threaded, accurately machined and rigidly inspected.

4 **Pipe Hangers** featuring easy adjustability after the piping is up.

5 **Humidification Equipment.** Complete systems employing the unique automatic control, Amco; furnished through American Moistening Company, a subsidiary.

6 **Automatic Sprinkler Systems.** The world's largest sprinkler manufacturer and contractor. The famous Quartz Bulb head is far quicker to operate than old fashioned solder heads. Its operating element is proof against corrosion and loading.

GRINNELL COMPANY

Branches in all Principal Cities Executive Offices: Providence, R. I.

nearly approach the ideal. As the swallows fly south, sales drop.

However, salesmen will follow the swallows south this winter to begin that campaign which is expected to develop the South American market before another spring. There is no general agreement within the industry as to the methods manufacturers will use to capture this foreign market. In fact, few airplane builders have been in a position to reach out actively. The majority have been concerned with problems of finance and sales at home. Having no surplus, they felt no urge to find markets where surpluses might be sold. Even now many of them have no surplus but they are seeking a market that will bolster sales during slack seasons on the home market.

Many companies are already appointing export agents and resident agents in various countries. They are sending factory representatives who can "speak the language" of the potential buyer. This method appeals especially to companies looking toward a Central American, then a South American market.

One manufacturer recently sent a factory demonstrator into Central America. The plane carried, beside the pilot, a sales agent who not only knows American business practices and aviation products but who also is a Latin and understands the Latin psychology.

One company has adopted the practice of sending its own representative to each foreign country where it believes business may be obtained. It has refused to enter any market where its own representative is not on the ground. This company has passed up Europe but now has a traveling representative in Mexico and Central America and has arranged for direct representation in China.

Aviation's peculiar problem

"WE DO NOT believe," said the sales manager, "that exporters can successfully introduce American aviation products in the foreign markets. We believe it takes direct representation by men familiar with the customs and language of the various countries and, if possible, a demonstrator should be used. Native distribution will be advantageous, although we believe that for the time being a factory representative will be sent by the strongly financed companies to assist."

Another company dealing in accessories for some time has had a South American office headed by a foreign representative with headquarters in Rio de Janeiro and with sales representatives in Brazil, Argentina, Chile, Peru, Ecuador, Bolivia and Colombia. It also pursues an active sales campaign in Japan, China, Siam and Australia.

Although some manufacturers now seek foreign outlets through export firms, establishment of export departments would appear to be the stronger method.

A stationary engine is a stationary engine in any country but one airplane may fail in attempting work at which another would excel.

The agent who attempts to sell airplanes must know aviation, must know his general market, something of the export trade and all there is to know about the plane he hopes to sell.

Some planes are offered in combination with several motors, water-cooled and air-cooled, at various price levels. Other planes are designed around certain engines.

Suiting designs to needs

AMONG this multiplicity of designs, one combination which will serve well in Peru may not serve so well in Germany.

Only a man versed in aviation can select the exact combination that will do the particular work his customer wants to do. If the customer expects to provide all kinds of aerial transportation, he may need many types of planes.

American exports of aviation equipment are not large now but the annual increase is so great that one cannot predict what it will amount to in a decade when the companies really set their minds upon building up the total.

At present American companies are third in the list in total value of aviation exports including planes, engines and accessories. British aviation export sales reached $7,434,700 in 1928. France exceeded that while the American total was only $3,664,723.

However, the American figure in 1925 was only $783,659. The 1928 total includes only 162 airplanes, amphibians and seaplanes valued at $1,759,653. In the preceding three years 193 craft were shipped or flown from this country but their total value was $100,000 less than the figure for 1928.

A significant feature of the 1928 total is that engines and parts sold to foreign buyers exceeded the value of the exported planes by about $145,417. This indicates that foreigners are replacing worn parts of foreign-made planes with American-made parts and adding extra equipment of American manufacture. It indicates that the jobber of airplane parts may take an important place in the export picture. The purchaser seldom orders planes from more than one manufacturer at a time but his demands for spares and accessories must be satisfied by a score of firms. Manifestly his buying would be greatly facilitated if delivery could be made by one jobber under one bill of sale.

It is significant that, with the exception of a few government purchases, exported airplanes will be used for civil, rather than military, purposes. While there is a satisfactory export of military planes, especially in such national crises as the Mexican revolution, the buyers want planes for passenger and mail service and, in some instances, to carry supplies and freight. Three cabin monoplanes that were purchased last year by Guatemala will not bear arms but will transport bullion, express, mail and passengers across virtually impassable forests and mountains.

The problem in many foreign countries is mainly one of communication. Communities can wait a week or so for commodities but they want their mail as soon as possible. Thus countries where the airplane is a far greater rarity than in the United States are turning to it quickly. They are being shown daily that the danger in the air is more apparent than real.

Six days now seven hours

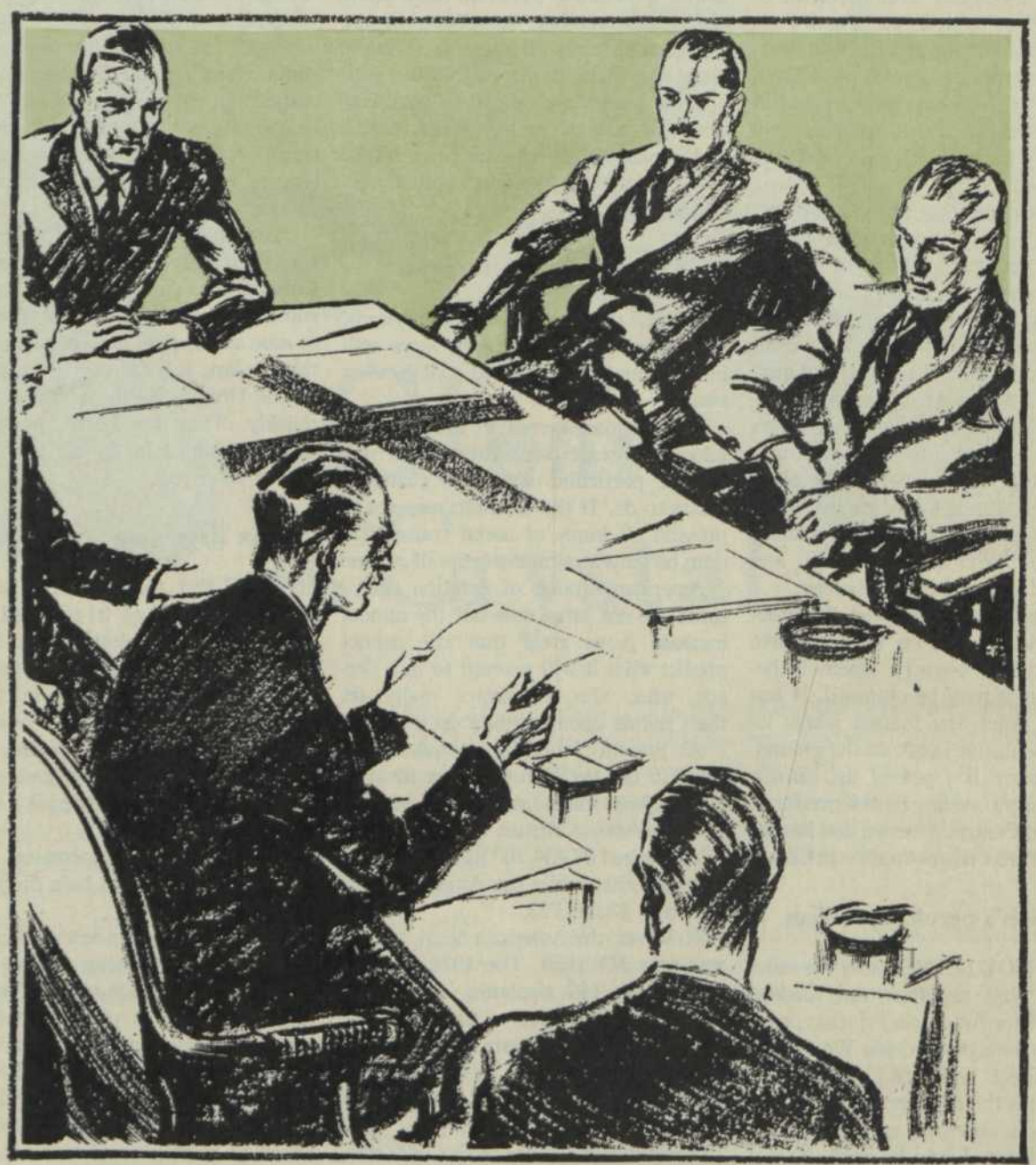
IN THE last three years a company operating a fleet of tri-motored planes between Bogota, Colombia, and Barranquilla, has delivered every passenger over the seven-hour route safely. The journey the planes make so speedily takes six days and six nights on the Magdalena River, the fastest possible means of travel before the air route was established.

A local result of increased foreign business probably will be a drop in airplane prices.

"An export trade in aeronautical products," says Dr. Julius Klein of the Department of Commerce, "will enlarge and stabilize production of those products with consequent savings in cost to the users and increased earnings for the makers. Market diversification through foreign sales stabilized demand which in most lines of trade is subject to seasonal fluctuation."

It is generally admitted that planes and engines cost the purchasers too much today. But when the aviation companies are able to stabilize their own business they will be able to pass the savings on to their customers. They realize, with justifiable selfishness, that greater profits will come through wider distribution made possible through lower prices. Each depends on the other.

When X declares



NATION'S

dividends... *do you share in them?*

X, symbolic of the powerful *external* forces that control modern business, is daily placing opportunities or obstacles in your path!

"SUN-TAN will be the vogue," sounded the voice of fashion last Spring. And the hosiery manufacturer with sun-tan shades to sell, shared in the dividends of X!

Spain appropriates millions of dollars for road improvements. And alert American automobile and tire manufacturers see X open up a rich new market for them!

Even as you read this, the X forces are at work! Legislative decisions . . . mergers . . . changing economic trends . . . fashion . . . new inventions . . . these are typical of the X forces—the power *external* forces —that dominate your business, and *all* business today! They are piling up unexpected profits—*extra dividends*—for those who understand them! They are smashing elaborate business projects for those who ignore, or misinterpret them!

Today, your business and your career depend upon your knowledge of the movements of these vital X forces. For the most part they are beyond your control! But you must be aware of them . . . adjust your plans to them!

And Nation's Business is edited with the specific purpose of giving you continuous, intimate contact with these powerful *external* forces. Every month it brings you authentic interpretations of political, financial, industrial and economic events in terms of your every-day business problems.

Glance through this very copy! Read "Things Our Merger Has to Face" by Lew Hahn, President, Hahn Department Stores, Inc. Analyze the problems the department store chains face. See how they are revolutionizing distribution!

And let James J. Davis, Secretary of Labor, tell you what new, improved machinery did to the glass making industry . . . and the glassmakers' union. "Don't Be a King Canute in Business" is an account of the disastrous result of ignoring the X forces!

In "Factors Which Make a Merger Sound," Dwight T. Farnham discusses an increasingly important X force that affects you. And "They Turned a City Around" tells how the Van Sweringens solved a perplexing X problem. "Will Chains Make Factories Their Slaves?" by H. M. Foster, is an analysis pertinent to you, no matter what your business interests!

The more than 310,000 executives, in all fields of industry, who will turn to the December Nation's Business to see what business leaders report on the dominating X movements of the current month, comprise America's keenest, most responsive audience. For your *advertising* story . . . as well as the editorial content of Nation's Business!

BUSINESS

We're All from the South on Thursdays



TO the initiated, Thursday is a day to look forward to and dream about, for that's the day Hotel Cleveland serves individual "Chicken Pie—Southern Style".

Meaty morsels, ready to melt in your mouth, of white breast and juicy second joint of tender young pullets. Choice Idaho potatoes boiled and cut fine. Fresh young celery, and a few cubes of broiled pork for zest and flavor. A dash of spice for seasoning, a sauce of chicken broth, cream and onions; the whole capped with flaky pastry, baked in a slow oven for an hour, and served piping hot.

With a treat like this, no wonder southern hospitality was far-famed!

Chicken Pie is served every Thursday noon, in the Main Dining Room and Bronze Room of Hotel Cleveland. A generous meal in itself —$1.10.

The surroundings are part of every meal

The quiet, luxurious surroundings, the deft but unobtrusive service, the well-known discriminating men and women



at the tables near by, all play their part in making the Cleveland such a delightfully satisfying place to lunch or dine.

Hotel Cleveland

Public Square • Cleveland

1000 rooms, 150 of them at $3

Directly connected with Cleveland's new Union Terminal railroad station, and in the heart of Cleveland's vast new business development.

Heading off the Future Floods

(Continued from page 60)

more per acre, and the lands involved are at present not worth the cost.

The first year's work on the project has been completed. It included the strengthening of main-river levees between Cape Girardeau and the Arkansas River at a cost of $3,300,000, between the Arkansas River and the Red River at a cost of $3,900,000, and below Red River at a cost of $3,420,000. Bank revetments were constructed in places below Cairo at a cost of $12,300,000, and dredging the navigable channel cost $1,000,000.

Work done on tributaries within the limits of backwater effects, with contributions by local interests, cost $30,000, and surveys costs $50,000.

The total of $24,000,000 strengthened greatly the protection works and, as already stated, the high water in the spring of 1929 passed to the Gulf without a crevasse in the main-river levees.

Thorough System of Levees

THE $30,000,000 appropriated this year will be expended under a program that includes $12,000,000 for protection levees off the main river, $8,000,000 for main-river levees, $5,000,000 for revetments, $1,000,000 for dredging, $1,000,000 for contraction works to improve the navigable channel, $2,000,000 for flood-control surveys of tributaries, and $1,000,000 for tributary work and other miscellaneous items.

The work includes part of the setback levee from Birds Point to New Madrid, work on the St. Johns Bayou levee, work along the Little River Drainage Canal, the protection levee from Lua Landing to Eudora, Ark., levees around Monroe, La., levee from Bordelonville to Hamburg, La., levee from Hamburg southwards toward Baton Rouge, work on the Ramus levee east of the Atchafalaya River, and work on the bounding levees and spillway proper of the Bonnet Carre Spillway.

The last has been contracted for under a three-year continuing contract. Main-river levee work includes one-year contracts and three-year contracts.

There is to be strengthening of the levees where they are weakest north of the Arkansas River. The Yazoo Basin levees north of Greenville are to be raised and strengthened to prevent any break such as the Mounds crevasse,

When writing to The Hotel Cleveland *please mention Nation's Business*

which occurred in 1927. Similarly there is to be raising and strengthening in the lower river. The revetment work will be placed where caving banks most need it.

Flood-control surveys will include project studies of the St. Francis River, the White, the Arkansas, the Yazoo, the Ouachita and the Red.

Safe against average flood

ALTHOUGH the project is to be constructed over a ten-year period and protection will not be complete against the superflood, or what is sometimes referred to as the "impossible flood," until the end of that period, protection against normal high water is already about complete. Within about three years the protection will probably be sufficient against most of the greater floods.

Of course, no one can foretell when floods will occur. The three greatest floods of record are those of 1844, 1882 and 1927. It is believed that the protection that will be completed within three years will be sufficient to prevent, to a large extent at least, any damages that might occur from any floods of record except the three referred to.

The best experts believe that a flood equal to that of 1927 is not probable more often than once in 50 or more years. However, although the probable average may indicate a considerable period before a great flood, such a flood may occur at any time. It therefore behooves us to push construction of the protection works with the utmost vigor consistent with economy and efficiency

The Phone Book Grows Cosmopolitan

INTERNATIONAL telephony has now reached the point where an international telephone directory is being published in Great Britain and on the Continent. Negotiations are in progress for the inclusion in the directory of Canada and the United States.

The book will be printed in English, German, and French; and subscribers' entries will be listed under countries, towns, and trades.

Thus the directory will make it possible for any inquirer to find out at a glance the principal firms engaged in some particular line of business in a given country or town.

The enterprise is being put through by a firm in Copenhagen.

Only ONE Best

Temperature can make your processes show PROFITS



THE FULTON SYLPHON COMPANY
Sylphon
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Human Nature in Business

By FRED C. KELLY

ONE OF the things I always wonder about when in Paris, or in fact, almost any place in France, is why French propaganda has been so much more effective than that in America to encourage the sale of bottled drinking water.

Inasmuch as Americans seem to dote on almost any kind of needless expenditure, especially when justified by common practice, it seems somewhat strange that American companies dealing in bottled water have not done more to create the notion that drinking water out of the faucet is hardly respectable, to say nothing of not being fashionable.

In Paris restaurants, even in rather low-priced places, and in all hotel dining rooms, the waiter invariably inquires what brand of water monsieur desires. Mind you, he doesn't ask if the guest prefers bottled water to that out of the faucet, but asks which kind, as if the idea of drinking ordinary water is too shocking to consider. On sleeping cars, the porter comes to one's section almost before the train is out of the station, to take one's order for bottled water. Yet painstaking inquiry in Paris brings always the information that ordinary city water is just as pure as that from Croton reservoir in New York. The answer must be that French salesmen of bottled water have been exceptionally clever propagandists.

♦

IN TYING UP a small package, a Parisian shopkeeper never fails to make a little loop in the string to hook over one's finger to simplify carrying the package home. I suppose one reason why this is not done in the United States is that we are too spoiled by the delivery luxury to carry even small packages home.

♦

HOTELKEEPERS in Vienna are making a desperate struggle to hold their tourist trade in the face of almost prohibitive taxes imposed by a Socialist city government. Of every dollar paid by a guest for his room, 20 cents goes to the city of Vienna—mostly to be used to help the working classes to live in apartments almost palatial. Not only must the hotelkeeper charge his guest enough more for a room to pay this heavy tax, but he is forbidden by the authorities to list the ordinary charge for the room and the tax on the bill separately. In other words, the guest is not supposed to know that he is contributing so much to the city government, on the theory that guests are accustomed to paying high prices for hotel rooms but might resent paying local taxes. When I complained about the price of my room the clerk told me about the tax and smilingly inquired:

"Aren't you willing to be taxed to help the poor?"

"What," I asked him "have the poor ever done for me?"

One Viennese hotel last year paid out to its stockholders approximately $118,000 in dividends. But they paid to the government about $800,000!

♦

THE TAX on his rooms is by no means all the tax that a guest pays while in Vienna. A part of all restaurant charges goes to the city—and if one enters a tearoom where dancing is going on, he must pay a luxury tax of 35 per cent.

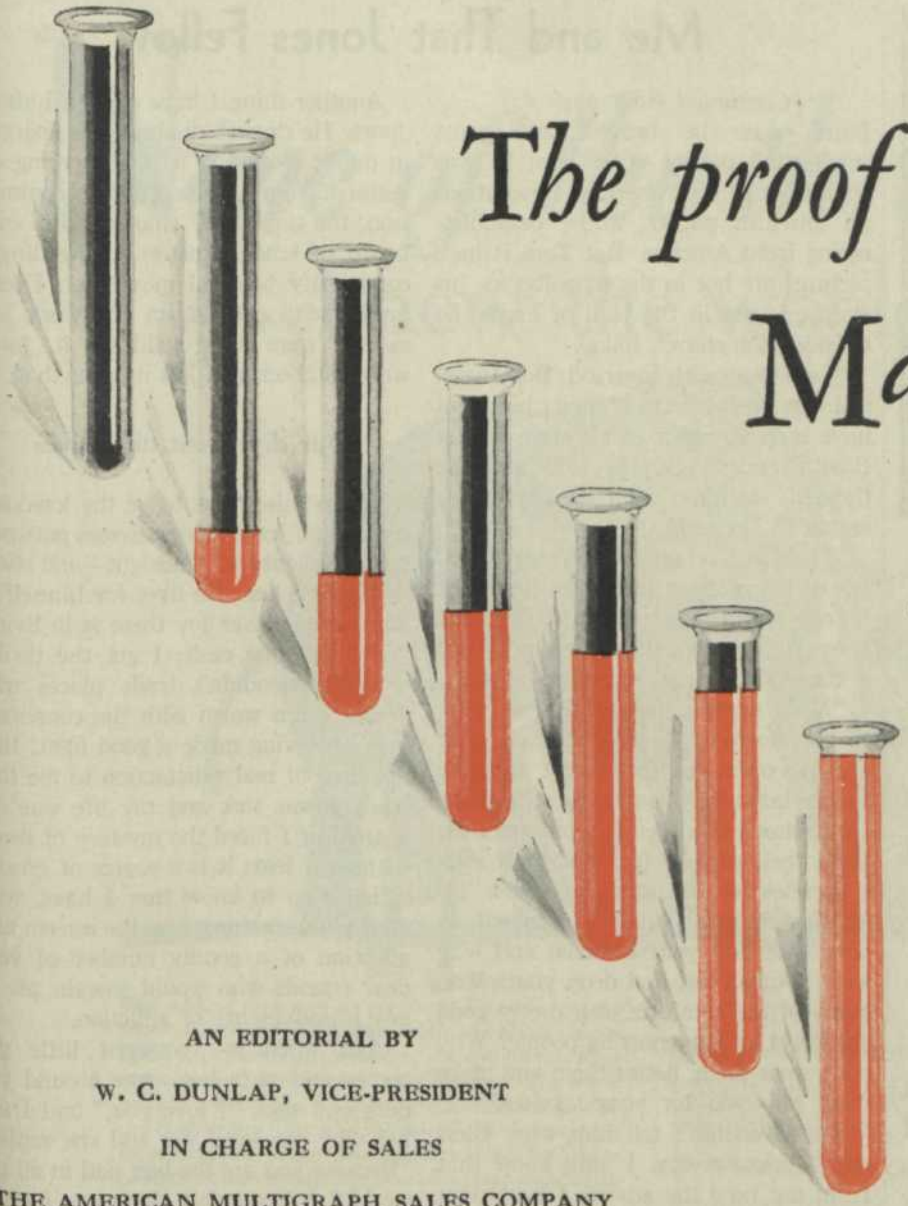
♦

VIENNESE shopkeepers are among the cleverest in the world at making the most of their show windows. They not only have a knack of making displays alluring but change them more frequently than I have ever known to be done elsewhere. It seemed to me that a number of shops had new window displays at least once a day.

♦

TO MY great relief I found no bargains in Vienna and therefore avoided buying anything. Come to think of it, all selling psychology is based on making the buyer believe that he is face to face with a rare buying opportunity. Even marriage rests somewhat on the same process. A man or woman wishing to be married tries to make the other party believe that the opportunity is a bit exceptional.

Some time ago I found in Switzerland such a bargain in a stop watch that I bought it, and ever since then I have been trying to find some personal use for a stop watch.



The proof of the Market is PROFIT

AN EDITORIAL BY

W. C. DUNLAP, VICE-PRESIDENT

IN CHARGE OF SALES

THE AMERICAN MULTIGRAPH SALES COMPANY

You can't measure the strength of a solution by its depth in the test tube. By the same token, you can't measure sales results by volume alone.

The volume that counts is the volume that isn't diluted with red-ink sales. And every sale that costs more in effort expended than it can yield in direct or indirect profit is a red-ink sale. Every market whose return can not repay the cost of cultivation is a red-ink market.

Selecting the markets that offer profitable volume is management's big responsibility today. Finding the means to cultivate these markets actively, intensively, and inexpensively is equally important if sales management is to follow through and realize its full possibilities.

Do You Know Your Market?

We have had very tangible evidence, in our own experience of the last two years, regarding the possibilities of careful selection and intensive cultivation. A radical reduction in mailing lists with concentration on preferred prospects for Multigraph equipment has reduced sales expense with no sacrifice in volume. Volume, in fact, has grown.

The average order is larger, and hence more profitable in proportion to sales effort required. Salesmen are enabled to serve their customers better than ever before. Both customers and salesmen are better satisfied.

Many features of our plan of operation can be applied to the problem of any organization. Part of our satisfactory results are due to careful analysis and part are due to new Multigraph equipment designed for carrying on selective selling with new effectiveness and economy.

I shall be glad to give you more details regarding our experience if you are interested. Address W. C. Dunlap, 1806 East 40th St., Cleveland, Ohio.

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CARIBBEAN
via
GREAT WHITE FLEET

Me and That Jones Fellow

(Continued from page 48)

Paine was the bravest and most intellectual patriot of his era; he was the father of the American Revolution; an unselfish patriot whose pamphleteering freed America. But Tom Paine's pictures are not in the schoolbooks, his statute is not in the Hall of Fame; he offended the church folks.

"Same way with Ingersoll; Bob Ingersoll was an intellectual giant; he might have been governor of his state and in time President. But he said what he thought—and you don't see any monuments to Ingersoll.

"Now let's be sensible: You married one of the prettiest and finest little girls in our town; you owe it to her and your children to settle down and adopt a conservative and practical attitude.

"Make money; the people don't want to be reformed, they don't want your esoteric opinions, they don't want to be intellectually embarrassed; they have been schooled in their inhibitions, their fears, their superstitions and their idiosyncrasies for thousands of years.

"Now why be unfair to yourself, to your wife and your children and why wear yourself out and deny yourself so many of the comforts of a pretty good old world by antagonizing people? Why not humor them, flatter them and make them pay you for your services?"

And I couldn't tell him why. Bless me if I know why. I only know that I did not heed the advice. I kept right on saying what I thought.

Jones follows the crowd

BUT Jones is different. He never echoes an opinion contrary to the popular clamor. Jones says nothing, does nothing, unusual. If Jones had had my chance he would not have been the publisher of a lone weekly today; he would own a chain of them.

We are surrounded by walls, ugly walls—walls of ignorance, walls of conventions, walls of superstition, walls of fear, of hatefulness and intolerance. I have been butting my head against these soul-imprisoning walls all my life and I expect to keep on butting.

I may not make so much as a dent in them, but I may at least call attention to the fact that they are there.

Canny old Jones would never butt his head against a brick wall. He would just ease himself up on top of the wall and enjoy the vantage point.

Another thing I have observed about Jones. He doesn't dissipate his energies in public works. If it is a harrying directorship on a state fisheries commission, the unpopular chairmanship of a board of school trustees, or heading a community hospital movement, I lend myself with enthusiasm and work just as if I were being paid for it. Jones writes a check and lets it go at that.

Our divergent objectives

AND so this seems to be the lowdown on me and Jones. He possesses patience, tact, foresight and hindsight—and sticks to his own last. He lives for himself; I live for whatever joy there is in living. Jones gets the cash; I get the thrills.

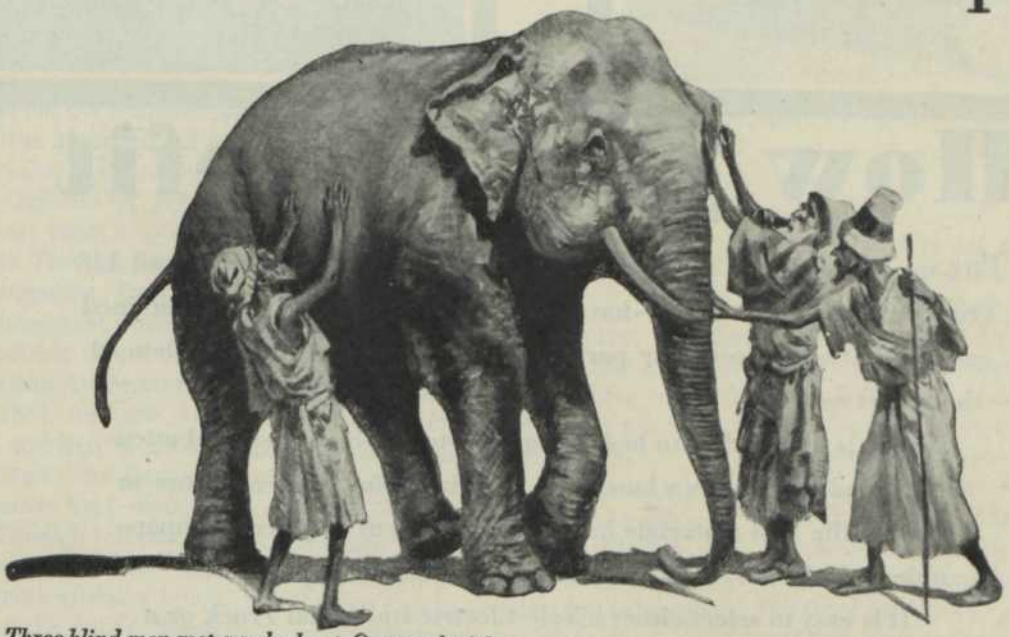
Still, I wouldn't trade places with Jones; I am warm with the consciousness of having made a good fight. It is a source of real satisfaction to me that when I was sick and my life was despaired of I faced the mystery of death without a fear; it is a source of greater satisfaction to know that I have, with all my blunderings, won the esteem and affection of a goodly number of very dear friends who would sustain me in any misadventure or affliction.

And when my youngest little girl comes and puts her arms around my neck and says, "I love you," and I ask her why she loves me and she replies, "Because you are the best dad in all the world," I forget that there are Joneses anywhere on earth and my heart swells in a way that leaves no room within me for any present wants or fears or regrets.

I know that I shall never catch up with the Joneses; I know that I have got to hustle all my days to hold my little own. I can't relax, slow down, change my methods or settle down; I was born that way. I was born that way and I am impelled by instinct or divine compulsion to swim doggedly upstream like a fish that must starve and bruise and torture itself to deposit its eggs far up the water-course where there is no silt and no pollution.

Am I happier than Jones? I do not know; I have no means of knowing. Indeed I am not sure that happiness is the aim and end of life. I only know that I am *myself*, and in rare moments of spiritual intoxication I am lifted up into a rapturous joy and peace; the hills break forth before me singing and trees of the fields clap their hands. And I am glad that I am that I am.

None of the three...
...knew the whole elephant



Three blind men met an elephant. One touched the trunk, another felt an ear, while the third placed both of his hands on the body. "An elephant is long and slender like a snake," said the first. "No, it is a winged animal like a bat," argued the second. "You are both wrong," insisted the third. "An elephant is a huge shapeless mass with a leathery skin." Failing to come to an agreement the three blind men quarreled.

* * *

Buying... making... selling... these departments often scattered across a continent ... each has an accounting set-up sufficient for its needs. Business today is big and complicated.

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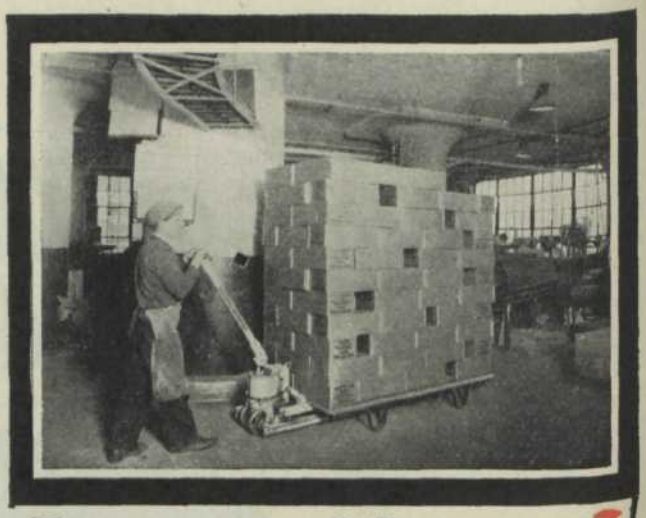
- Payroll and Labor Distribution
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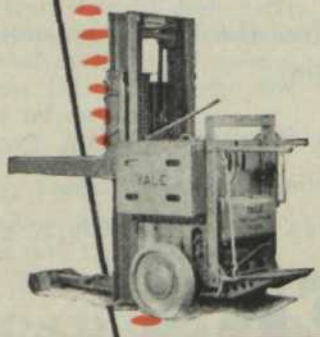
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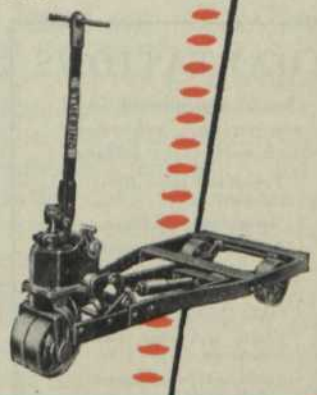
No job is too small—no task too great—to receive the special attention of Yale engineers whose sole aim and effort will continue to provide the best materials handling equipment at prices comparable with the very best materials and workmanship.

It is easy to select either a Yale Electric Industrial Truck or a Stuebing Hand Lift Truck from the Yale line—it is complete. There are models and types to meet practically every condition.

Let us analyze your materials handling problem and then suggest, without obligation to you, that particular method best suited for you. Write to Dept. K 10.

THE YALE & TOWNE MANUFACTURING COMPANY
Stamford, Connecticut
STUEBING DIVISION, Cincinnati, Ohio.





TRADE YALE MARK

StueBing

THE PATTERN OF COMMERCE



AS SEEN BY

Raymond Willoughby



WITH the consolidation of the American Art Association and the Anderson Galleries of New York, art takes a place in the news of mergers. Through their auctions these two companies have handled many of the important American and European collections of art and literature. The American Art Association was organized in 1883, and the Anderson Galleries were founded in 1900. Since their establishment, the total sales of the two companies have amounted to $130,000,000. Through this combination the art of business and art itself are brought to a more effective union. By such a wedding the public comes to a clearer realization that "all the arts have a sort of common bond, and are connected by a sort of relationship."

♦

EUROPE is turning more and more toward the standardization of output which has made possible the methods of quantity production characteristic of the United States, the National Association of German American Technologists was told at its convention in Philadelphia. This statement was presented in a paper prepared by Prof. Willibald Trinks, who heads the Department of Mechanical Engineering in the Carnegie Institute of Technology.

All views of our technical progress do not include the foreign scene, of course, but there is no lack of substantial evidence to support belief in continual advancement. At their exposition in Cleveland the National Machine Tool Builders exhibited new devices in virtually every one of the 260 displays.

"New" is the most memorable word in the catalog of exhibits. "A new one-piece, nose-type collet chuck," a "new vertical hydraulic multiple adjustable spindle driller," "a new surface broaching machine," "a new hexagon nut grinder," "a new high speed gear generator to produce continuous tooth herringbone," "new high speed ball bearing drills"—and so on. Terminology for the technician. Names that confound the layman. Names to conjure with.

♦

THE announced intention of the Cadillac Company to produce a sixteen cylinder car at the beginning of 1930 provides a fresh measure of the luxury market in the United States.

Lawrence Fisher, president of the Cadillac Company, fixes the place of the new car with saying that "in this country every year there are sold some foreign cars as well as a limited number of domestic automobiles which have exclusiveness, luxurious appointments, and unusual performance as their chief appeal. It is for this limited market that this supercar was designed."

Meantime General Motors has entered competition with foreign cars in their own lands, but on price levels that suggest convenience rather than luxury. The considerations which directed the corporation to associate its resources with one of the German producers are indicated by Alfred P. Sloan Jr., its president. He told stockholders that

> in view of the fact that quantity production is impossible without a broad market to absorb the production, it is evident that the problem in such countries is somewhat different than it is here. What I mean is that to obtain the largest possible volume, the type of motor car must correspond with the purchasing ability of the masses.
>
> It must be the most economic type of transportation that can be developed. For these and other reasons, notwithstanding the large volume of business General Motors enjoys and the trend of expansion, not all the potential of these markets is open to General Motors with the American type of motor car.

These two statements came to a common focus of official belief that General Motors has the capital and organization to enable it to participate in all parts of all markets.

♦

WHETHER or not it can be reasoned that business itself has inspired most of the laws which affect it, there is evidence to support the belief that commercial and legal interpretations of the public interest are steadily harmonizing the two points of view. A current opinion of immediate relevancy is provided by Gilbert Montague, New York lawyer.

At a meeting of the Michigan State Bar Association in Detroit he declared that "never before in this generation has there been more sympathy and concurrence than today exist between the genuine desire of business and the willingness of courts and government to cooperate with business."

An earlier idea of law made immutability the sovereign virtue. In our times flexibility has invited regard along with stability. As Mr. Montague put it, new conflicts in economic life, and new pressures of economic interests all call for continual readjustments of the law to changes in our economic life.

It may be that we are beginning a more mature phase of our lawmaking. A view in that direction is provided by Walter Lippmann, editor of the New York *World*. Writing in the *Yale Review* he points out that "the outstanding leaders today are chary of new projects often openly in favor of repealing laws, constantly concerned about the exorbitant difficulty of enforcing laws. . . . It is as if the age of innocence had passed away. . . . We have begun to learn that enforcement is complicated by enforceability, that the will of the majority has to be executed as well as declared."

♦

WHERE change is the most characteristic certainty, as in aviation, there is a natural appropriateness in prophecy. To quote a forecast by William B. Stout,

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As part of a complete industrial power service, Wagner Motors of various types are furnished in vertical design with a variety of mountings to suit many special conditions of applications. Power satisfaction comes from fitting the motor to the job and that is why Wagner makes every commercial type of alternating-current motor.



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designer of the Ford air transports, "If there is one thing that we are altogether decided upon, it is that the present airplane is not going to be the future airplane. We are building today merely a forerunner of what we can see in the future."

But future developments must make a beginning in the present, and Mr. Stout states the problem as he sees it. He says:

The problem today is not only an engineering problem, it is a human, psychological problem. Engineering must solve it, but we must understand first that safety is the first fundamental. Safety in our present planes is largely dependent on power, but we must go further before we can satisfy the public that we are building something it wants to ride in. If it looks like a grasshopper with a broken back, the people will not ride in it.

And now that trips of ten hours and more are becoming common, passengers are likely to demand more comfort in the air than they ever demanded on railroads. That specification spells a new pressure on the designers, for it means a heavier load requirement on engines in the matter of larger fuselages in proportion to wing areas.

♦

INDUSTRIES fashioned on boyhood resolutions are not rare, perhaps, yet there is a quality of realism and persistent purpose altogether convincing in the career of Frederick Henry Royce, a partner in the Rolls-Royce firm. Early in life he developed a decided aversion to noise. A good part of his youth was spent in working in the underground railway of London. His job was to clean the arc lamps used for illuminating the tubes. The overwhelming noises which assailed his ears 16 hours a day made such a profound impression that the achievement of silence became a directing aim of his life.

When he eventually got into the business of making automobiles with Mr. Rolls, his fundamental ideal was the production of a silent car. In the old underground he had felt that uncontrolled noise was the consequence and penalty of defective engineering. He came to believe that if this noise were permitted to increase in proportion to the expansion of transportation, the people of London would develop an incurable case of nerves. He resolved to prevent that unhappy state insofar as he was able.

Motivated by that humane ideal, the Rolls-Royce Company in England and America has striven to make silent operation a distinguishing quality of its cars—"like the harmony of the spheres that is to be admired but never heard."



Tune in... on each department of your business every morning

This method gives you the vital facts and figures every morning at nine

LIKE the general who is directing his army, the successful executive must keep in touch with every unit of his organization every day.

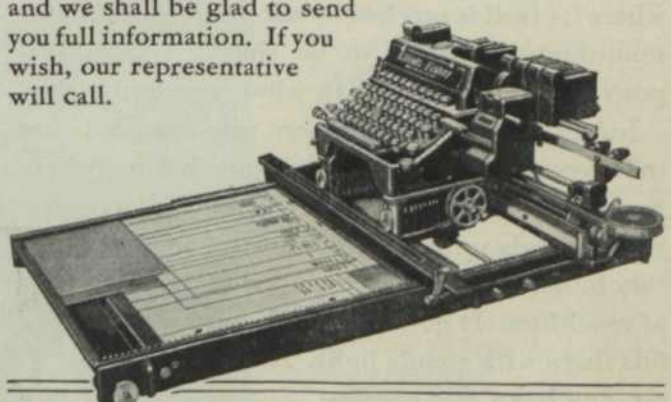
And the kind of reports that enable him to reach his objective consist of cold figures—brought right up to the minute. "Everything's fine," may sound encouraging from a department head, but your decisions reflect a much truer picture when you act on concrete evidence: "Shipments 1525"; "sales $21,350"; "cash in banks, $49,780" . . . and so on.

With Elliott-Fisher you get these vital figures every day . . . from every department of your business. Not a month old or a week old, but posted up to the very hour when business closes for the day. The next morning a summary is placed on your desk showing exactly what was accomplished the day before.

Elliott-Fisher Accounting-Writing Equipment gives you complete control by placing the essential figure facts in front of you before they become ancient history.

Without adding a man to your payroll, or in any way confusing your present plan, Elliott-Fisher machines consolidate your accounting methods into a single, unified plan. Hundreds of business firms that are distinguished by their efficient management, use Elliott-Fisher.

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Gentlemen: Kindly tell me how Elliott-Fisher can give me closer control of my business.

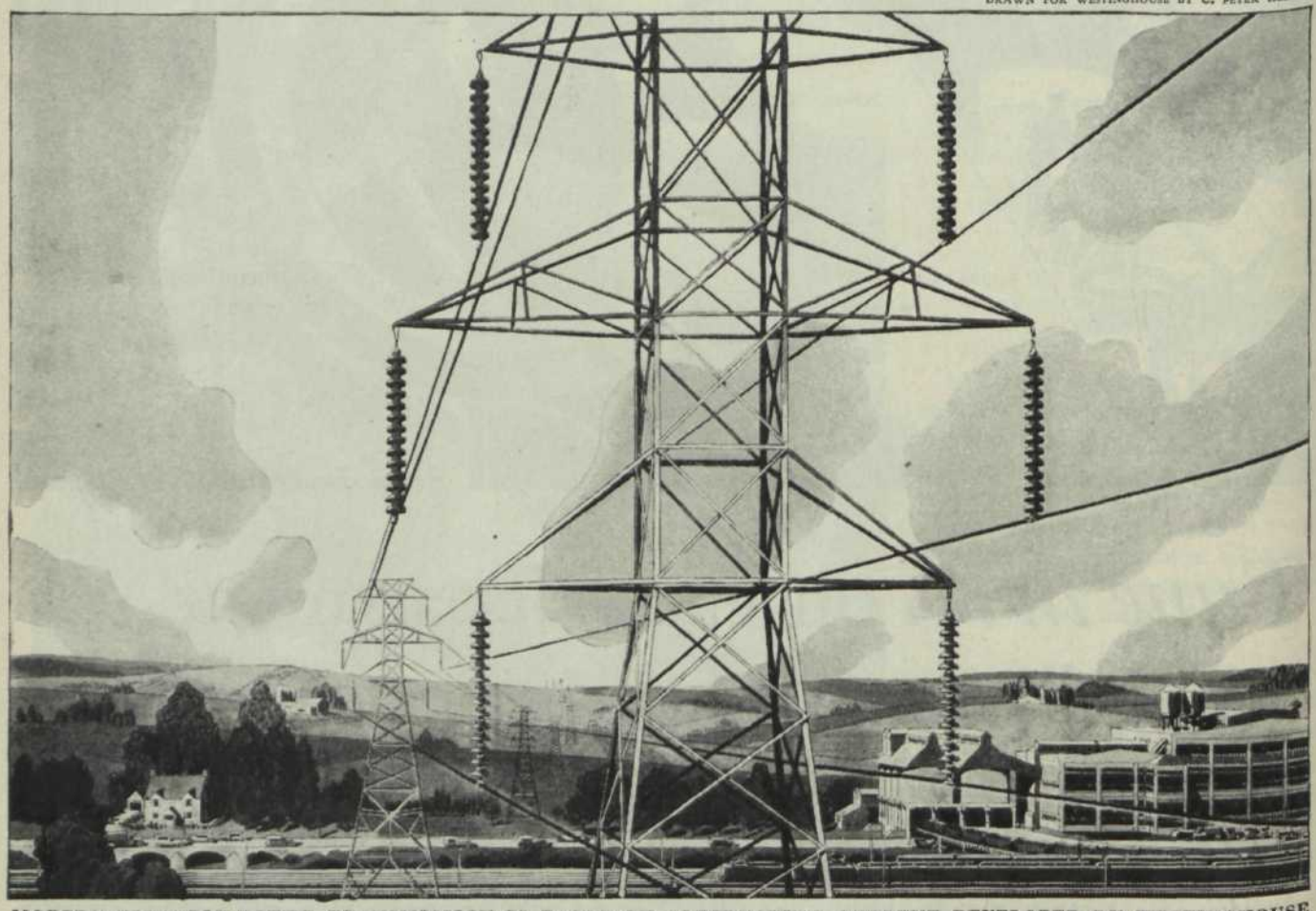
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WHAT WESTINGHOUSE IS DOING TO MODERNIZE THE WORLD

DRAWN FOR WESTINGHOUSE BY C. PETER HELCK



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Where power flows business grows

Follow the course of America's early industry where its trail is marked by old mills, and see how manufacturing used to be shackled to water-power. Compare this with what you find today.

Industry now locates where raw materials are most convenient. For today's power flows where man desires it, directly over hill and dale, then spreads unseen through acres of factory buildings to reach the individual drives of machines. It goes into dark corners and fills them with steady light. It brings fresh air, and heat, and comfort.

Electricity takes loads from weary backs, and responsibility from tired minds. It brings shorter hours and higher outputs and increases the earning capacity of workers. Modern industry has accepted electric power as the shortest route from raw material to finished product. Moreover, present-day bankers accept the demand for electric power as an accurate index to industrial activity.

The widespread distribution of electricity is made possible by the initiative of companies which manufacture power in large quantities and deliver it uninterruptedly to the doorstep of industry.

Westinghouse has co-operated, step by step, with the power companies by providing apparatus to meet each new need for the generation, transmission, and application of electricity for homes, farms, offices and industry.

Westinghouse Electrification
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Wiring

The Sign of a Westinghouse Dealer

Westinghouse

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NEWS OF ORGANIZED BUSINESS

By WILLARD L. HAMMER

Secretaries Meet

THE Michigan Commercial Secretaries Association met at St. Joseph, Mich., September 5-7 and devoted its entire program to state and local taxation activities of chambers of commerce.

The secretaries gave particular attention to a review of the Greater Muskegon Chamber's work on assessments and industry's comparative taxation burdens; to work done by the Grand Rapids Chamber on municipal and school budgets, and to the work of the Detroit Board of Commerce on financial questions, including budgets, bond issues and long-term financing.

The secretaries considered the advisability of establishing a central research agency for the entire state, with a view to providing commercial and trade organizations with factual information on financial operations of the state government and on comparative efficiency of various municipal operations in the state.

The thought was that present efforts to promote efficient municipal government would be strengthened if detailed data were available on how much each city spends for fire and police protection, elementary and high school education, street construction and maintenance, and other municipal activities.

Boston Harbor

THE Boston Chamber of Commerce some time ago chartered the steamer *Rose Standish* and took 900 men and boys on an afternoon's cruise of Boston Harbor. The ship was equipped with amplifiers, and lecturers were at the microphone to explain points of interest. During the tour of the water front visits were made to the Navy Yard, the airport, fish market, drydock and other points of special interest.

St. Louis Opens Convention Hall

THE St. Louis Chamber of Commerce recently opened a new hall called The Arena. The Arena is the permanent home of the National Dairy Show and is built to accommodate every variety of convention, from the smallest industrial exhibit to a national political gathering.

The Arena will house such other attractions as championship boxing and wrestling matches, aircraft and automobile shows, circuses, machinery displays, and fairs and grand opera.

The Arena is flanked by exhibition buildings, vast structures in themselves but dwarfed by the center building. The subsidiary buildings are 300 feet long and almost as wide, while The Arena, oval in shape, is nearly 500 feet long and more than half as wide.

The Arena and its auxiliary buildings represent an investment of $2,000,000, provided by a group of civic-minded business and professional men.

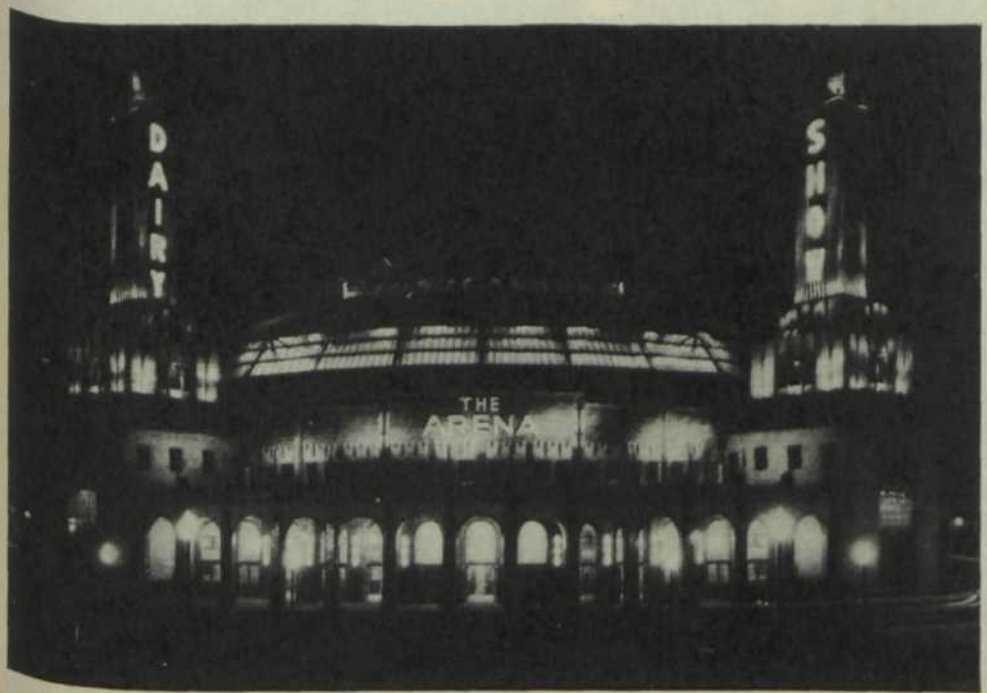
Kansas City Studies Taxes

THE Kansas City, Kans., Chamber of Commerce established a Bureau of Governmental Research in 1927. At first some difficulty was experienced, but city commissioners have apparently been convinced that the organization is interested only in obtaining economical government and reasonable taxes.

Next year's budget, as originally planned, contemplated an increase of 27½ cents but the increase has been limited to 11 cents instead.

Much of the credit is attributed to the Chamber of Commerce committees which worked in cooperation with the commissioners in drafting the budget.

The Chamber has authorized additional appropriations for permanent employment of an accountant and an engineer to carry on and expand this work. Additional information on the Kansas City project may be obtained from the Finance Department, National Chamber.



The Chamber of Commerce of St. Louis in conjunction with the National Dairy Show recently dedicated its new convention building, The Arena

Annual Report —New Style

SOMETHING novel in annual reports is that of the managing director of the National Association of Life Underwriters. Mr. Roger B.


Save-
UPKEEP ⇨ DEPRECIATION ⇨ REDECORATION ⇨
LIFE ⇨ FIRE LOSS ⇨ WEAR ⇨ TIME ⇨ LABOR ⇨ DIRT ⇨ WEIGHT ⇨
STEEL STACKS
STEEL SKYLIGHT
STEEL CORNICE
STEEL ROOF DECKS
STEEL WINDOW TRIM
GALVANIZED VENTILATING DUCTS
STEEL LATH
STEEL STAIRS
FIRE DOORS
STEEL DOORS AND TRIM
WALL TILE
STEEL JOISTS
PARTITIONS
TOILET PARTITIONS
STEEL FLOOR FORMS
STEEL CEILINGS
STEEL DELIVERY CHUTES
RADIATOR ENCLOSURES
STEEL MARQUISE

1211 *Buildings* Burned Today

A SMALL city burned today—nine hundred and thirty-one homes, five schools, five churches, fifteen hotel buildings, one hospital, four warehouses, six department stores, two theatres, eight public garages, three printing plants, three dry goods stores and ninety-six farm buildings. *That* is the average daily toll taken by *Fire* in the United States.

This same destroyer day after day snuffs out twenty-seven lives—nine being children under ten years of age.

Appalling!—And yet a few years ago, conditions were even more disastrous. Due to greater care and the growing use of steel building materials, there has been a decline in the fire loss. *Steel products never start a fire or feed the flames!*

Steel partitions, doors and trim, steel stairways, steel lath and other steel building products are saving lives and property every day—many of them having definite ratings from the Underwriters' Laboratories because of their recognized fire resistive qualities.

Substantial savings in construction costs and additional fire safety are being obtained with such products as steel shower stalls and bathroom tiles, steel joists and floor forms, steel ceilings, cornices, canopies and stacks.

When weight saving is desirable, steel roof decks, galvanized roofing and siding and similar articles, make possible safe reduction in the weight and cost of supporting members.

Adaptable to factory, commercial building or home—advancing in artistic design and utility each year—steel products are today the accepted standard for all types of structures where savings from fire loss, saving of life and money, savings in space, weight, wear, time, labor and dirt, are weighed carefully.

Complete information concerning these products may be obtained by writing the Trade Research Division, National Association of Flat Rolled Steel Manufacturers, Terminal Tower Building, Cleveland, Ohio.



-with Steel BUILDING PRODUCTS


Columbus Cathedral

CUBA

An adventure in happiness

CROWDED hours of joy, gaiety, relaxation the Continental flavor of life in the milieu of tropical romance . . . where living can be an art . . . only a few hours from the United States . . . luxurious modernity keeping house with Old World glamour . . . grilled balconies . . . narrow, cobbled streets or smart motor boulevards . . . fascinating shops (French imports, oh! so reasonable) . . . soft, liquid Spanish syllables . . . palatial theatres . . . glittering ballrooms . . . smart, sophisticated, charming people . . . the brilliance, freedom and friendliness of Latin America . . . scars of centuries in ancient patios . . . cloistered peace of old Monasteries . . . twilight enchantment of cathedrals . . . amiable clamor of life along the Prado and the Malecon . . . moonlight, silvering the rugged ramparts of Morro Castle . . . smart parties in smart places . . . orchestras and orchids . . . tolling cathedral bells above the city's cacophonies . . . movement and color weaving many beautiful patterns of life . . . jockey club thrills . . . unbelievable speed in Jai-alai . . . golf . . . breeze-filled sails . . . magnificent clubs, palaces and hotels . . . all the little and big comforts you're accustomed to . . . American boarding schools for the kiddies . . . a rejuvenating vacation with all the satisfaction of your own home . . . a New Adventure in happiness!

For information, any travel bureau, any railroad, steamship or airplane passenger office, any Cuban consulate or the Cuban National Tourist Commission, Havana.

When asking for further information on CUBA *please mention Nation's Business*

Hull, the director, at the underwriters' recent fortieth convention, submitted a plan of action for the succeeding five years in lieu of the customary detailed review of the preceding years progress.

"The Five Year Look" is the booklet which gives the plan in print. It shows some of the things the Association is doing and ought to do in the period 1930 to 1935. The program constitutes a powerful argument for membership in the Association.

Denver Handbook

THE Denver, Colo., Chamber of Commerce has just issued a vest-pocket booklet containing facts and figures concerning that city. The booklet provides a good example of how a great deal of information can be packed into a small space, and is in a form that will enable members of the Chamber of Commerce to keep copies close at hand for mailing or direct transmittal to persons interested in Denver.

The booklet covers such matters as markets, transportation, raw materials, labor, climate, schools, taxes, water, population, and a dozen other pertinent subjects. Copies can be obtained from the secretary of the Denver Chamber.

A Chamber Teaches Ethics

THE Principles of Business Conduct adopted by the National Chamber are taught in a novel way by the Bremerton, Wash., Chamber. At each luncheon of the Chamber of Commerce and of the various service clubs, a printed slip is placed at each plate. The slip contains just one of the "principles." A member of the committee on business methods and ethics then reads to the members present the explanation of that principle as given in the pamphlet issued by the National Chamber.

The secretary reports that this is an effective way to impress the principle upon Chamber members.

Coming Business Conventions

(From information available November 6)

Date	*Place*	*Organization*
December		
1-7	St. Louis	Mason Contractors Association of the United States and Canada
3	Minneapolis	Northwestern Hardwood Lumbermen's Association
3-5	Chicago	American Petroleum Institute
3-5	Pittsburgh	National Glass Distributors Association
5	New York	American Acceptance Council
5-6	New York	Toy Manufacturers of the United States of America
6	Chicago	National Dairy Association
6-11	Chicago	American Farm Bureau Federation
9-14	Chicago	National Association of Amusement Parks
10	New York	Shoe Polish Manufacturers Association of America
11	Cleveland	Malleable Iron Research Institute, Inc.,
11	New York	Linseed Association

FOR THE ADVERTISER WHO KNOWS -



THAT the experience of leading local advertisers is the best guide to the value of the media.

THAT it pays to concentrate a national campaign where it may be supported by the direct sales advertising of the same product.

THAT department stores everywhere are shrewd, experienced and the leading buyers of newspaper advertising space.

This Message

For the first nine months of 1929 Chicago department stores (loop and outlying) placed 4,362,153 agate lines of advertising in The Chicago Daily News.

2,307,096 more lines than in the highest morning daily paper.
2,375,623 more lines than in the next highest evening paper.
735,594 more lines than in the highest daily and Sunday paper.
1,553,876 more lines than in all morning daily papers combined.
1,255,368 more lines than in all other evening papers combined.
1,998,423 more lines than in all Sunday papers combined.

Advertising Representatives:

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Joseph R. Scolaro
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SAN FRANCISCO
C. Geo. Krogness
303 Crocker 1st Nat. Bank Bldg.

ATLANTA
A. D. Grant
711-712 Glenn Bldg.

Member of The 100,000 Group of American Cities

Here is the recommendation of Chicago's leading advertising group to advertisers everywhere on the choice of Chicago newspaper media.

THE CHICAGO DAILY NEWS

Chicago's Home Newspaper

BANKERS TO INDUSTRY EVERYWHERE



C. I. T. Service is offered through 135 offices in the United States and Canada, and in 60 foreign countries. To the manufacturer this means uniform financing facilities available wherever he has branches, dealers, or customers. To the merchant it means quick, personalized finance service made dependable and economical by the strength and volume of a world-wide organization.

C. I. T. finances the deferred payment sales of manufacturers and merchants selling more than 70 diverse products. Every C. I. T. office renders a complete financing service—investigating credits, purchasing contracts, making collections.

C. I. T. LOCAL OFFICES IN U. S. AND CANADA

ALABAMA
Birmingham
ARIZONA
Tucson
Phoenix
ARKANSAS
Little Rock
CALIFORNIA
Fresno
Los Angeles
Sacramento
San Diego
San Francisco
San Jose
Stockton
COLORADO
Denver
CONNECTICUT
Hartford
DIST. OF COLUMBIA
Washington
FLORIDA
Jacksonville
Miami
Orlando
Tampa
GEORGIA
Atlanta
Macon
IDAHO
Boise
ILLINOIS
Bloomington
Chicago
INDIANA
Fort Wayne
Indianapolis
South Bend
IOWA
Des Moines
KANSAS
Hutchinson
Wichita
KENTUCKY
Lexington
Louisville
LOUISIANA
New Orleans
MAINE
Portland
MARYLAND
Baltimore
MASSACHUSETTS
Boston
Springfield
MICHIGAN
Detroit
Grand Rapids
Lansing
MINNESOTA
Duluth
Minneapolis
MISSISSIPPI
Jackson
MISSOURI
Kansas City
St. Louis
MONTANA
Butte
NEBRASKA
Lincoln
Omaha
NEVADA
Reno
NEW HAMPSHIRE
Manchester
NEW JERSEY
Asbury Park
Camden
NEW JERSEY
Jersey City
Newark
NEW YORK
Albany
Binghamton
Bronx
Brooklyn
Buffalo
Glens Falls
Hempstead, L. I.
Jamaica, L. I.
Jamestown
Mt. Vernon
New York
Poughkeepsie
Rochester
St. George, S. I.
Syracuse
Utica
White Plains
NORTH CAROLINA
Charlotte
Greensboro
Hickory
Raleigh
Winston-Salem
NORTH DAKOTA
Minot
OHIO
Akron
Cincinnati
Cleveland
Columbus
Dayton
Toledo
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Oklahoma City
Shawnee
Tulsa
OREGON
Portland
PENNSYLVANIA
Allentown
Erie
Harrisburg
Philadelphia
Pittsburgh
Reading
Wilkes-Barre
RHODE ISLAND
Providence
SOUTH CAROLINA
Columbia
Greenville
SOUTH DAKOTA
Sioux Falls
TEXAS
Abilene
Amarillo
Dallas
TEXAS
Fort Worth
Houston
San Antonio
Wichita Falls
TENNESSEE
Bristol (Va.-Tenn.)
Chattanooga
Knoxville
Memphis
Nashville
UTAH
Salt Lake City
VIRGINIA
Norfolk
Richmond
Roanoke
WASHINGTON
Seattle
Spokane
WEST VIRGINIA
Charleston
Huntington
Wheeling
WISCONSIN
Kenosha
Milwaukee
CANADA
Calgary, Alta.
Edmonton, Alta.
Halifax, N. S.
Hamilton, Ont.
London, Ont.
Montreal, Que.
Ottawa, Ont.
Quebec, Que.
Regina, Sask.
St. John, N.B.
Toronto, Ont.
Windsor, Ont.
Winnipeg, Man.

COMMERCIAL INVESTMENT TRUST CORPORATION

Executive Offices: One Park Avenue, New York

Subsidiary and Affiliated Operating Companies with Head Offices in
New York · Chicago · San Francisco · Toronto · London · Paris · Berlin · Brussels · Copenhagen · Havana
San Juan, P. R. · Buenos Aires · Sao Paulo · Sydney, Australia · Offices in more than 150 cities

CAPITAL AND SURPLUS OVER $100,000,000

When writing to Commercial Investment Trust Corporation *please mention Nation's Business*

What the World of Finance Talks Of

By MERRYLE STANLEY RUKEYSER

RETAIL sales during December will be scrutinized with especial care this year by observers of the passing show in business and finance.

The great question is the extent to which the recent collapse of stock prices will reduce purchasing power, especially for luxuries. Common sense would indicate that the collapse will not help the retail vendors of precious stones, fine cars, luxurious suburban estates and winter cruises. And yet there are offsetting factors.

Desire and the spirit of giving will induce those who have been deflated, though not financially ruined, to make purchases—possibly somewhat more modest—in spite of their dehydrated balance sheet position. By the Christmas shopping season, the adaptable will have adjusted themselves to the new status. The stock market tornado would have been infinitely more devastating to retail sales if it had occurred early in December rather than in October.

Apart from near term results, the situation recalls the warning by A. H. Wiggin, chairman of the Chase National Bank of New York, many months ago that the American public had cultivated the dangerous habit of converting capital appreciation into purchasing power.

Mr. Wiggin thought it sounder economics to base purchases on income rather than capital gains. But numerous economic illiterates were not following the austere standard he laid down. In his last annual report Mr. Wiggin said:

"To an undue extent in recent years, the American people have been selling capital assets at a profit and treating the profit as income. Fortunately they have recapitalized by investment part of the profit. But not all has been recapitalized. A substantial part has been spent in current consumption, partly luxury consumption, and the volume of consumer demand has undoubtedly been increased thereby."

♦

IN RETROSPECT, it appears that the opening of the floodgates of highly emotional liquidation constituted the price the public had to pay for months and years of reckless bull speculation. It is futile to seek a purely economic cause for the psychological panic.

For extended periods, amateur speculators bought stocks merely because they thought they were going up. The impetus of such buying carried quotations to levels which analysis found it difficult to justify either in terms of earnings, assets, or reasonably near term prospects.

The New York Stock Exchange average of all listed stocks attained its peak last December, but the more widely published indexes of selected leading stocks made new summits last summer, reaching the peak early in September.

Shortly after Labor Day, discerning investors began to take advantage of high prices to cash in profits. One reason for so doing may have been the early evidence of a lull in certain lines of trade, after the record-breaking summer. Steel, building, and automobiles gave evidence of recession. The tapering off of activity evidently meant that the excited bull expectation that business would continue indefinitely to make new high records without interruption would not be fulfilled.

The selling throughout September and early October was temperate, quiet, but persistent. It probably came from investment trusts, analytical financiers, wealthy capitalists, and some foreign agencies.

The forced selling by London houses, which suffered losses from the Hatry failure intensified the force of the earlier liquidation.

Meantime, the wider lay public continued optimistic, and marginal operators kept on increasing their commitments, taking much of the stock offered by the "strong" sellers. That this passing of shares from strong to weak hands was taking place was suggested at the time by the anomaly of a continued rise in brokers' loans while security prices were falling.

Late in October it was evident that the buying energy of the marginal operators had expended itself. The gradual, orderly decline of prices, resulting from good selling, had gradually eaten into margins, and brokers began to call customers to support their ac-



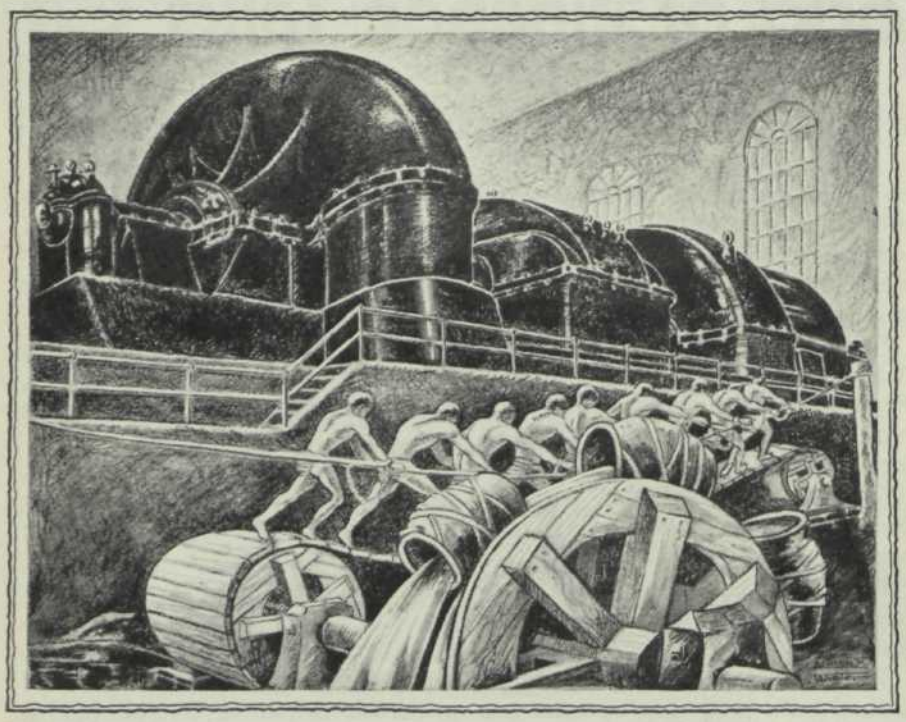
JOHN SHERWIN, JR.

★

ONE of the youngest bank presidents in the country is John Sherwin, Jr., head of the new Midland Bank, Cleveland. Just turned 28, President Sherwin was formerly a vice president of Cleveland's Union Trust Company. Early next year the Midland will move to a new home in the Van Sweringen Terminal group

Tri-Utilities Corporation

POWER ~ GAS ~ WATER

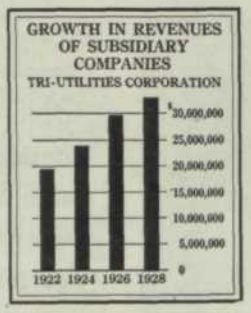


Are You Seeking Both Stability and Profits?

AS a basis for safe and stable investment, nothing can excel the fundamental need for water, fuel, power. The need has not changed since man invented his first crude water-wheel, rubbed two sticks together to make a fire, and found he could move a boulder with a lever.

More than two hundred and ninety million dollars of public utility properties operating in 26 states and providing the necessities of power, gas and water to a population estimated in excess of 4,260,000 distinguish the Tri-Utilities Corporation system as an exceptionally interesting field for safe and profitable investment.

Tri-Utilities Corporation Five Per Cent Convertible Debentures afford all the advantages of sound investment with the additional opportunity, through the conversion privilege, of participating in the profits accruing to ownership of the Corporation's Common Stock.



Write for special folder

G. L. OHRSTROM & CO.

INCORPORATED

Forty-Four Wall Street, New York

PHILADELPHIA *225 South 15th St.* · CHICAGO *231 South La Salle St.* · LOS ANGELES *650 South Spring St.* · BOSTON *30 Federal St.*

MINNEAPOLIS *Baker Building* · DETROIT *Buhl Bldg.* · MILWAUKEE *425 East Water St.*

ST. LOUIS *Liberty Central Bldg.* · SAN FRANCISCO *Russ Bldg.* · LONDON, ENG. *1 Royal Exchange Ave.*

When writing to G. L. OHRSTROM & CO. INCORPORATED *please mention Nation's Business*

counts. Many did so not once, but several times.

But as each call went out, some were found unable to respond. Accordingly, to the "good" selling was added necessary liquidation by those with impaired marginal accounts. Short sellers also intensified the force of reaction by offering huge lines of stock for sale at critical moments. Each further step down the ladder of prices impaired hitherto soundly margined accounts, and automatically brought new distress selling.

By Thursday, October 24, the wider public which had been buying stocks merely because they expected them to go up was convinced that it was desirable to get rid of stocks. The idea spread quickly through the popular mind and on that memorable day there was a mad rush for the exit. From all parts of the country orders to sell at the market streamed in.

It takes differences of opinion to make orderly stock markets, as well as horse races, and for a time there were vast phalanxes of excited sellers, with no offsetting group of buyers. That unbalanced condition was reflected in the terrifically sharp declines between sales on the memorable Black Thursday, October 24.

Accordingly, to provide bids for orderly liquidation, Thomas W. Lamont, of J. P. Morgan, informally organized a consortium in which the leading banks participated.

The banking pool temporarily allayed the fears, but on the following Tuesday the flood gates of liquidation were again opened.

Hitherto good margin accounts had been impaired by the collapse of prices in the previous week and there was another amazing episode of necessitous selling.

Before the gong rang at the Stock Exchange more than 16 million shares had changed hands. By that time, a large proportion of the marginal customers had been dumped out, and stocks had been transferred to "strong" hands. Within the week there had been a wholesale transference of stocks from marginal speculators to outright buyers. That this shifting took place was demonstrated by a decline of $1,096,000,000 in brokers' loans.

♦

EDDIE CANTOR had undertaken to write a short humorous book on the great stock market shakeout. A comedian who speculates always is well hedged. Even if he loses, he can recoup his for-



Diversified investments ▲ ▲ ▲ that follow the favorable trends of world industries

GENERATIONS of experience have shown that business conditions and security values do not ordinarily fluctuate at the same time or in the same direction in the various countries of the world. While some are prospering others lag behind. While some have more capital than they can profitably use, others need capital so badly that they are willing to pay liberally for it, even on good security.

The American Founders group of investment companies take advantage of these international variations. At the time of the recent break in domestic security prices they had only a small proportion of their funds in American common stocks, but large amounts in cash, and were also able to withdraw funds from abroad for selective investment at home. Always the funds of these investment companies are in carefully chosen, marketable investments, bonds as well as stocks. Such international and inter-industrial diversification affords better than average results, particularly when funds are so reinvested as to take advantage of economic changes.

The consolidated resources of the American Founders group of companies exceed $200,000,000 and their securities are owned by more than 50,000 investors.

Additional information may be obtained from bankers and investment dealers, or from Founders General Corporation, 50 Pine Street, New York City.

DECORATIONS BY ROCKWELL KENT . CUT IN WOOD BY J. J. LANKES



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AMERICAN FOUNDERS CORPORATION

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General Management Investment Companies

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UNITED STATES & BRITISH INTERNATIONAL COMPANY, LTD.

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Sharing the Prosperity of Many Companies, Many Industries, Many Countries

When writing to THE AMERICAN FOUNDERS GROUP *please mention Nation's Business*

SECURITY-FIRST NATIONAL BANK OF LOS ANGELES

A consolidation of Los Angeles-First National Trust & Savings Bank and Security Trust & Savings Bank, two of the oldest and largest banks in Southern California

J. F. SARTORI
President and Chairman of the Executive Committee

HENRY M. ROBINSON
Chairman of the Board

Security-First National is fully equipped to do every kind of banking business and has branches in 61 communities, extending from Fresno and San Luis Obispo to Imperial Valley.



Selecting Investments

With the steady growth of industry, there has come, through public financing, a plethora of security offerings, so numerous and varied that the investor's problem becomes one of careful selection.

In this situation, it is logical to consult and rely upon experienced financial institutions.

We can recommend specific issues or relieve the investor of the perplexing problem of selection through the recommendation of issues of sound investment trust companies whose chief function, in arranging a portfolio, is to discriminate between the great number of securities now available to the investor.

OTIS & CO.

Established 1899

CLEVELAND

New York	Chicago	Philadelphia	Detroit	Cincinnati
Denver	Kansas City	Toledo	Akron	Columbus
Louisville	Colorado Springs		Canton	Massillon
Boston	Milwaukee		St. Louis	Davenport

MEMBERS: *New York, Chicago, Cleveland, Detroit, Philadelphia and Cincinnati Stock Exchanges, Chicago Board of Trade, New York Cotton Exchange and New York Curb Exchange*

tune by telling the world about it. One suggestion for a title was "Wailing Wall Street."

♦

IN THE old South, when a plantation was sold the slaves went with it automatically. Nowadays, however, the hired help in both institutions involved is not always retained intact after bank mergers.

For example, when the Guaranty Trust Company of New York recently absorbed the National Bank of Commerce, it did not take over Stevenson Ward, the president of the National Bank of Commerce, who instead became a partner in a large brokerage house.

The Guaranty, however, did absorb "Garry," the uniformed doorman at the National Bank of Commerce, who for years has been a valuable human asset in disseminating good will. Garry's geniality is unchanged. Only the inscription on his collar reads "Guaranty" instead of "Commerce."

♦

AS SOON as it was apparent that the backbone of the bull movement in stocks was ended, it followed that there would be a prompt reversal of Federal Reserve policy. The reduction of the punitive six per cent rediscount rate of the Federal Reserve Bank of New York, which was a phase in the campaign to check the abnormally rapid growth in the use of funds for speculative purposes, to five per cent could be taken as a matter of course after the speculative situation changed.

Feeling that there was no doubt of the imminent change, the Bank of England reduced its discount rate from six and one-half to six per cent several hours before the New York bank had acted.

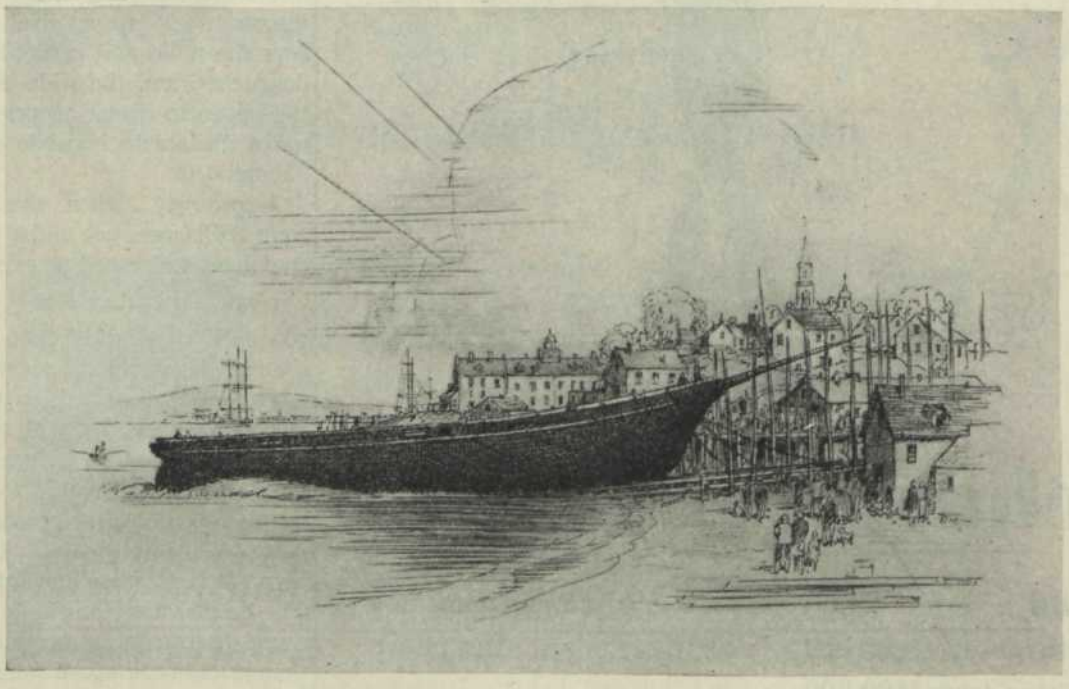
The late September rise in the discount rate of the Bank of England was a belated, forced maneuver to keep in step with New York. The Bank of England hated to make credit dearer at a time when British business was slowly reviving. Accordingly, it brought the rate down again as soon as international conditions made it safe to do so. A further reduction in the British bank rate would seem to be the next step.

♦

SHORN lambs are perennially annoyed by the glib manner in which financial commentators refer to their tragic destruction as a healthy corrective movement.

The truth is that the stock market traditionally mends its errors more

New England's Largest Financial Institution



YES
we honor the Clipper Ship Era

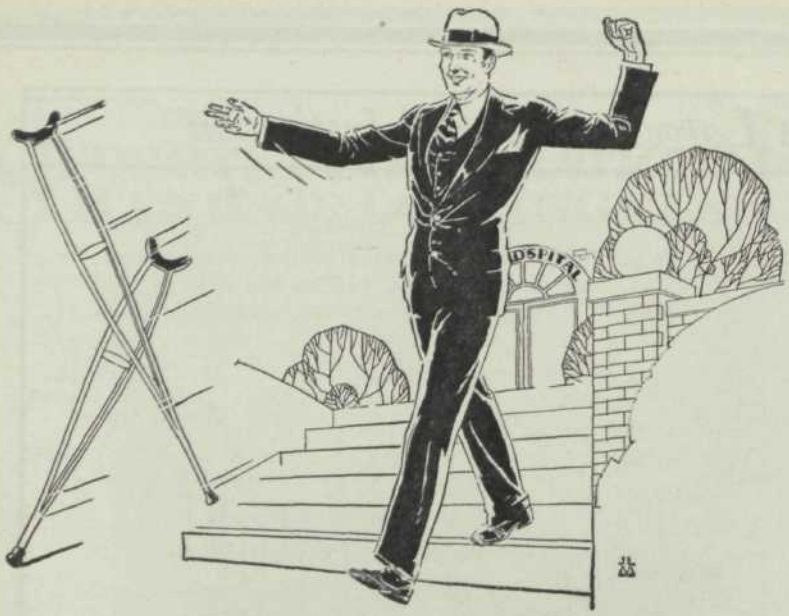
IT was an age when dauntless New Englanders sailed the seven seas to trade with the world. But New England is *not living in the past today*. Her industries are busy turning out an extraordinarily diversified list of products. Of 348 separate industries listed in the latest United States census, 217 are represented here. Any business man planning a new enterprise or the expansion of one already established should consider New England *first*. It offers an abundance of skilled labor, unexcelled transportation and shipping facilities, abundant power and ample supply of credit.

We will welcome the opportunity of telling you what you want to know about this great industrial beehive.

The FIRST
NATIONAL BANK *of*
BOSTON

1784 ★ ★ 1929

Capital and Surplus $50,000,000



Discharged *as* Cured

WITHIN a year a manufacturer of electrical parts has gone from $100,000 in red to better than $50,000 in black. Inventory has been cut in two. Bank loans have been reduced to one-third of the original amount. The concern now discounts all its bills.

The patient, who only recently was considered almost beyond treatment, has been discharged as cured.

When first asked by uneasy creditors to diagnose the case, the Guardian's immediate impression had been one of slow moving inventory, vacillating management, too much plant, too many different items and poorly organized sales effort.

A new chairman was recommended. Production was restricted to the faster selling lines. Buying was budgeted. Merchandise on hand was sold and a rapid turnover established. Sound methods quickly brought results.

A great commercial bank like the Guardian is consulted daily by its customers on many fundamental problems like this. Constant contacts with production, merchandising and day-to-day trends frequently enable the Guardian to offer suggestions leading directly to increased profits.

GUARDIAN TRUST COMPANY
of CLEVELAND

RESOURCES MORE THAN $150,000,000

© G. T. Co.

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rapidly than it builds up an unsound situation. The speed of the corrective movement late in October was abnormal. It indicates the extent to which the public has become regimented and standardized. The extension of ticker facilities to even remote parts of the country, the discussion of speculative phenomena over the radio and in syndicated news dispatches, and the wide public attention given to tipster agencies helped to make the amateur public dangerously like-minded.

Accordingly, when the conversion from bullishness got under way, it was completed with startling celerity.

♦

MY OWN view is that the public changed its viewpoint regarding stocks when it was deprived, as the autumn season got under way, of the spectacle of a further upturn in prices. Accordingly, those who bought for the naïve purpose of unloading on some one still more optimistic at a still higher price began to be skeptical towards prospects. The decline itself originally started because discriminating operators believed that prices were above intrinsic values, especially in view of the lull in some lines of industry.

Moreover, the experienced sensed the approach of the time when the buying energy of the public would have expended itself.

When the technical position of a market is bad, even slight incidents can set off the convulsions. Roger Babson's famous bearish speech early in September helped to focus the public mind on the question of whether prices were unwarrantably high. The refusal, on October 11, of the Massachusetts Department of Public Utilities to approve the plan of the Edison Electric Illuminating Company of Boston to split its stock also contributed significantly to sway the public mind.

In setting forth the reasons for its action the Commission said:

"The reduction of the par value of the stock at this time will serve no public interest. On the other hand, it is likely to encourage many innocent people in the belief that it is the forerunner of substantial increases in dividends, with the consequent result that they will invest in stock at a very high price without their hopes being realized. Any attempt to change the par value of this stock, in our opinion, should be left until the selling price on the Boston Stock Exchange more nearly approximates its real value.

"The higher the speculative price of the stock the more embarrasing to this

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The strategic position of the small town in American industrial development is fully discussed in the booklet, "America's New Frontier," which the Middle West Utilities Company (20 North Wacker Drive, Chicago, Illinois) will send upon request.

THE smaller communities of America have in recent years made vast strides in all the things that indicate richer lives. In better schools, in new highways, in the nearly universal family ownership of the automobile, the most remarkable gains have occurred outside the great metropolitan centers. In many cases states with a preponderant rural population are at the head of the procession.

This is a new thing in our history. Americans have long been used to such progress in metropolitan centers and in newly opened lands in younger states of the Union, where we are still carrying on with modern facilities the work of the first settler and covered wagon. But the renaissance of the "open spaces" is now as characteristic of the older settled Atlantic seaboard as of the youngest commonwealths of the Union.

This diffusion of wealth and more generous life is directly related to the widespread diffusion of electric power.

The universal availability of ample ever-ready electric power, so flexible that it can be instantly applied to any task, from cleaning a rug to energizing an entire factory, has brought into the small towns and the countryside the most productive force of our times. Accustomed as we are to measure higher living standards in dollars and cents or in visible things—like motor cars, telephones, buildings and miles of highways—the very cheapness of power tends to conceal its importance as an asset to these towns. Yet the revival of the small town is based squarely on the industrial activity which has followed the construction of widespread electric power systems over the countryside.

* * * *

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department, as, if we fix a price higher than $215 a share, we are fixing a price much in excess of the real intrinsic value of the stock, and we are encouraging those who invest in the stock to claim that dividends should be such as to give them a fair return on the stock at the price which we set.

"We think that the investor in the petitioner's stock has no assurance that the company will be able to increase its rate of dividends in the near future, or, in fact, that it will be able to maintain the increased rate of dividends recently voted.

"Thus, in our judgment, approval of the company's proposal, at this time, would have little, if any, effect in causing a wider distribution of its stock among investors. Such as would occur would, in our opinion, be to the disadvantage of the investor."

The timeliness and the effect of these remarks are beyond question. However, they raise two issues. First, whether the opinions expressed are sound. And, second, whether it is the business of a governmental bureau to give the public speculative advice. As for the latter point, I think it involves a hazardous extension of paternalism.

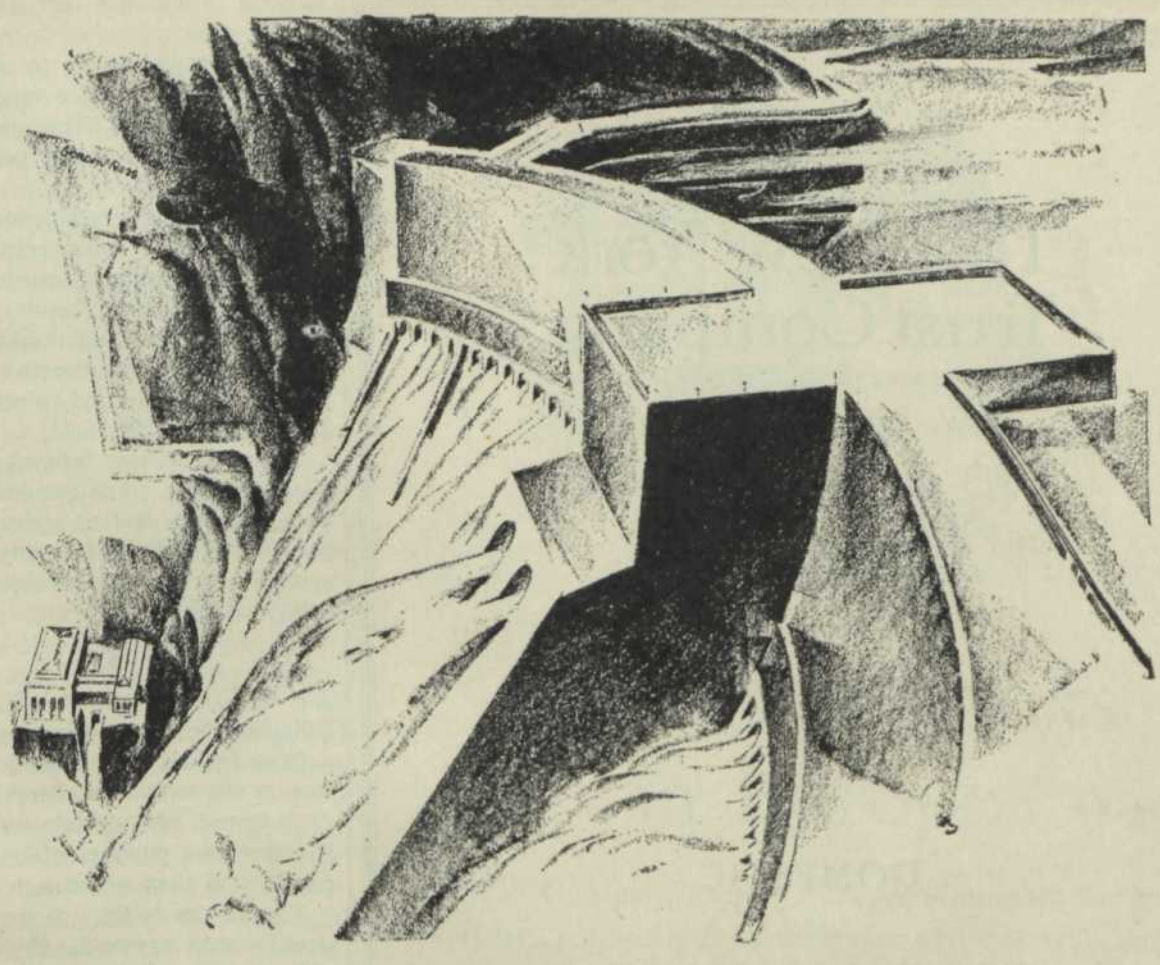
The state of Ohio set a precedent in this direction some three years ago when it refused to license Florida realtors to operate in that state on the ground that Florida subdivisions were inflated. In both instances, the opinions of the bureaucrats were backed by sound economic reasoning, but the precedent of telling the public when the prices are cheap and dear is dangerous.

The public would naturally feel aggrieved if it got bad advice, and is lulled to a false sense of security if it feels that the state is relieving it from the responsibility of thinking for itself. Of course, governmental agencies and officials should collate and publish data impartially, irrespective of its bullish or bearish connotations.

Senator Robinson, of Arkansas, in fact recently attacked conspicuous leaders of the Administration for having disseminated bullish opinions earlier in the cycle.

♦

FOLLOWING closely after the savage attack of the Massachusetts Commission on the legitimacy of then prevailing quotations for public utility shares, Francis E. Frothingham, of Coffin & Burr, Inc., in presenting the report of the committee on public utility securities to the delegates at the eighteenth annual convention of the Investment



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Bankers Association of America at Quebec, said:

"It is certainly open to question if futures are not being overpaid for in too many instances. The principles of sound investment cannot permanently be set aside.

"That they have been temporarily so set aside, has but made exceptional opportunities for prudent investors to buy the senior securities (bonds) of established properties—and nowhere is the opportunity more attractive for the practice of these sound principles than in the public utility field.

"Your committee believes that this Association can do no greater service at present than to caution against speculative and uninformed buying and to counsel the prudent buying of public utility securities."

♦

AT THE climax of the Wall Street collapse, the impecunious, who have nothing to lose, looked down upon the more or less capitalistic classes in a spirit of snobbery. The attitude was not unlike that of a poverty-stricken Chinese couple who slept underneath a bridge.

Toward midnight, they heard a wealthy man approach. He was muttering to himself in anguish over his current reverses.

Hearing him, the pauper wife remarked, "Ah, happy indeed are those who are free of money worries."

Then the husband arose, threw out his chest with pride, and queried, "And to whom do you owe your fortunate position?"

♦

WHEN deflated customers in saddened brokers' offices looked wistfully toward the windows, one philosophical broker patted them on the backs and said, "Don't worry; it's only money."

♦

THE REPUTATION of the stock market as a fortune teller has been impaired. In fact, Carl Snyder, the brilliant and creative statistician, has produced charts to show that market changes are in response to shifts in business, rather than in anticipation of them.

Albert W. Atwood, in his volume on speculation, states the riddle as follows:

"If the happenings on the exchanges affected only the speculators themselves, they would deserve little consideration. Whether these markets act as barometers because of the superiority of the speculative vision in anticipating future con-

ditions, or because of the hypnotic, psychological influence of the stock market upon industry in general, it is hard to say."

My own view is that the stock market is a phase, and a reflex over the long pull of economic conditions, but on short wings it creates its own excesses and then must correct them. The recent crisis was a technical correction of earlier speculative extravagance. It seemed to be associated with overspeculation and mob psychology, rather than underlying economic causes.

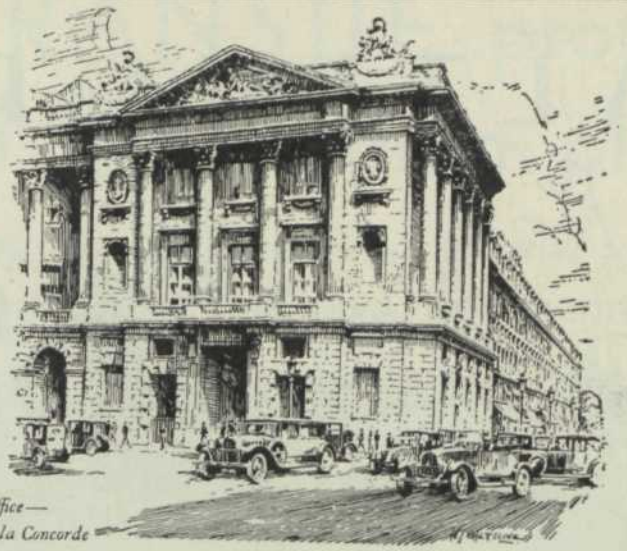
The real issue is the extent to which the impaired confidence resulting from the Wall Street fiasco, will temporarily discourage business initiative. Fortunately, the market break came at a time when business was in an excellent condition to withstand shocks. It was free of the usual seeds of depression. Inventories in most lines are neither excessive in quantity or inflated in price. Furthermore, there is no shortage of credit, but really an abundant reserve of funds.

The recent setback in the market is unlike that in 1920-21. On the earlier occasion, the liquidation in the stock market was intensified by the urgent need of business men to realize cash to support their own business enterprises. This time, there has been no such forced selling. The distress selling resulted merely from the impairment of margins resulting from earlier price declines.

♦

IN PRIVATE, discerning observers have criticized the big bankers for lack of preventive measures before the collapse. Many houses of issue and corporations continued up to the bitter end to exploit the public appetite for stocks. But after the collapse came, the big bankers, led by Thomas W. Lamont, of J. P. Morgan & Company, and such outstanding commercial bankers as Charles E. Mitchell, chairman of the National City Bank; A. W. Wiggin, chairman of the Chase National Bank; William C. Potter, president of the Guaranty Trust Company; Seward Prosser, chairman of the Bankers Trust Company; and their associates showed skill in financial stage management.

If they had anticipated the break of Black Thursday, they might have averted the collapse. At least, one outsider urged them to put in bids for stocks in advance. Instead they waited until the event, and put in their support bids about noon Thursday after there had been public evidence of airpockets in the market.



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But after that they played their cards well. They met frequently, and in their public utterances avoided saying too much or too little. They called forth a chorus of reassuring statements from corporation presidents, high government officials, and sage capitalists, including John D. Rockefeller, Sr., who had been silent on such matters since 1907.

John J. Raskob, who divides his love between the du Pont-General Motors interests, and the Democratic party, was in a strategic position to issue a decisive statement. Before the last Presidential election he warned the public that in his opinion stock prices were too high. In the midst of the collapse, he announced that good railroad stocks and many industrial stocks were again cheap, and added that he and his friends, who had been skeptical of the stock price level, were re-acquiring standard issues.

♦

THE BEST piece of window dressing in connection with the effort to restore the financial mob to sanity, was the announcement by the big money lenders on Tuesday, October 29, that they had radically reduced marginal requirements on loans to brokers. That announcement relieved the pressure on brokers and in turn enabled them to let up on customers whom they had ruthlessly been calling time and again for additional margin.

With panicky feeling resulting in a stampede to get out of stocks, the press voluntarily enlisted itself in the campaign to stress the brighter side of the situation.

In the midst of the crisis, I went to Washington and sounded out the private views of the best economic minds on the federal government payroll, and found that they honestly believed that fundamental economic conditions were sound and healthy irrespective of temporary lulls in steel, autos, and in the building trade.

♦

IN TIMES when a large section of the public has temporarily lost its balance, the press, it seems to me, has a duty not to do anything that will accelerate the stampede. The press at such a time is like an usher in a burning theatre. The usher should seek to induce the patrons to walk, not run, to the nearest exit, and should refrain from shouting that the building is not fireproof and that the asbestos curtain is out of order. An inflammable use of even the truth during times of panic may have devastating consequences.

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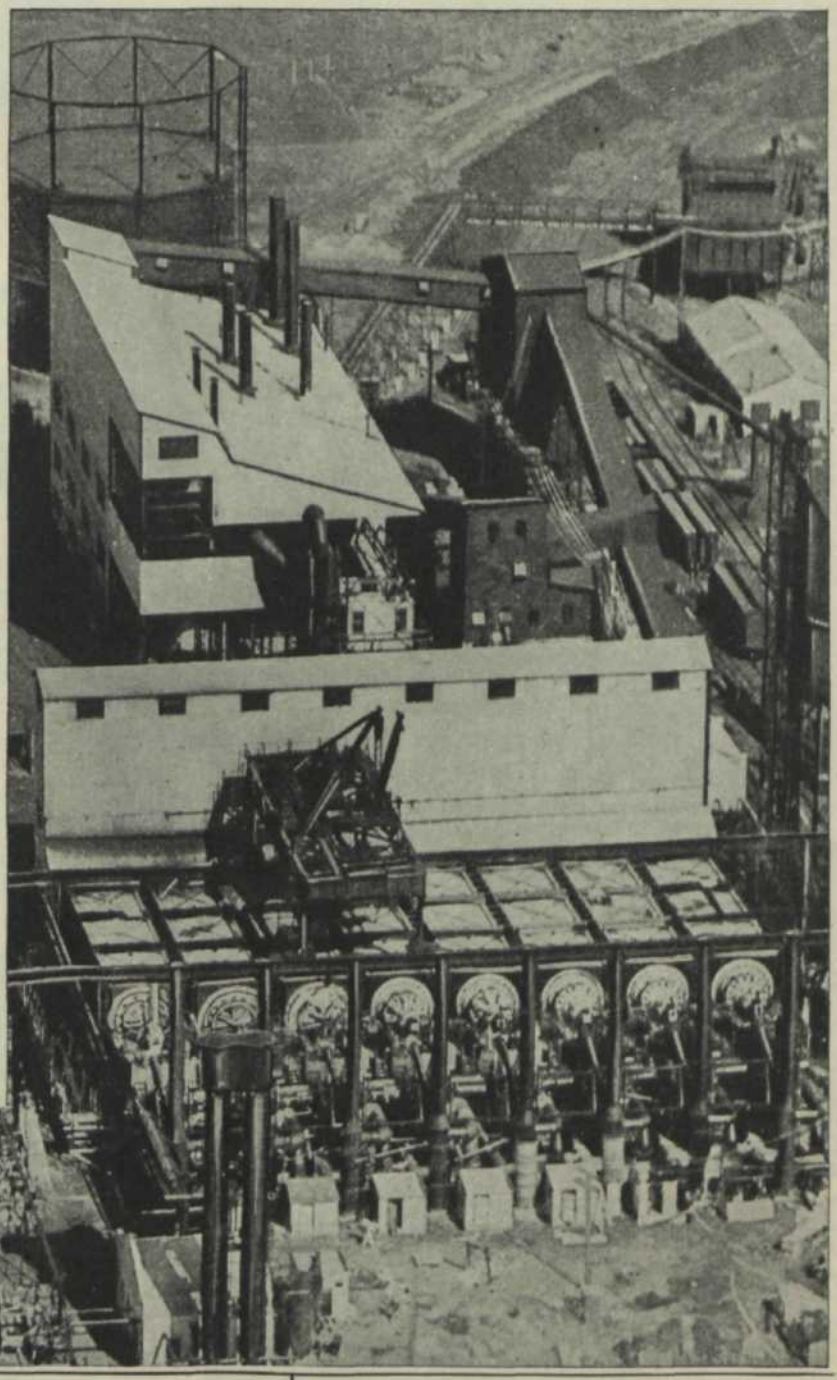
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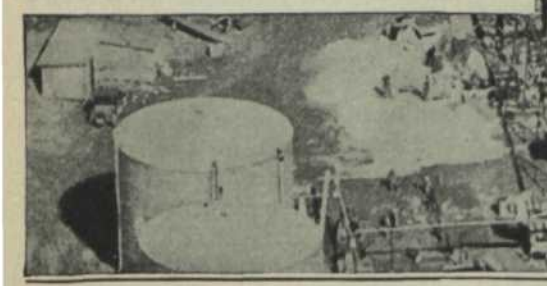
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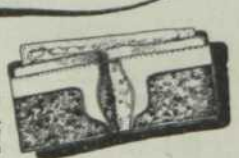
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periods the press should not go out of its way perpetually to be bullish. If it does, it merely helps to build up excesses, which eventually must be painfully corrected. In ordinary times, the duty of the press is to interpret the facts honestly and objectively.

The additional effort of tabloids and others to act as a speculative wet nurse to the public is a questionable activity. Contrary to the tipster editors, there is no one best buy each day. Securities must be suitable as well as sound.

The time element always conditions the desirability of current purchases. Stocks might be intrinsically cheap at a particular period and hence excellent long-term purchases, but, if the trend is to be lower for another month, they are not attractive "buys" for the trader.

The tipster gives the inexperienced speculator a false sense of security, and makes him forget the exceptional hazards perpetually involved in speculation —especially in marginal speculation.

♦

THE RECENT collective temporary loss of faith in American business institutions brought to my mind a remarkable volume called "Memoirs of Extraordinary Popular Delusions and the Madness of Crowds," written in 1852 by Charles Mackay. Bernard M. Baruch, who once called the book to my attention, confided that the little volume has had a profound effect on his own career.

"In reading the history of nations," the author pointed out, "we find that, like individuals, they have their whims and their peculiarities; their seasons of excitement and recklessness, when they care not what they do.

"We find that whole communities suddenly fix their minds upon one object, and go mad in its pursuit; that millions of people become simultaneously impressed with one delusion, and run after it, till their attention is caught by some new folly more captivating than the first. . . . Money, again, has often been a cause of the delusion of multitudes.

"Sober nations have all at once become desperate gamblers, and risked almost their existence upon the turn of a piece of paper. Men, it has been well said, think in herds; it will be seen that they go mad in herds, while they only recover their senses slowly, one by one."

♦

ONE OF the canniest stock market economists, who has turned his rare judgment into a colossal fortune, told me at the height of the rally following

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the Wall Street collapse that he thought pessimistic talk about business and the return of support stock to the market would create new buying opportunities.

Though foreseeing the possibility of some moderate further recession in business, he expected nothing fundamentally depressing in business.

He thought that from a long-term standpoint the bursting of the speculative bubble was constructive, for he believes that it will pave the way for a more thoroughgoing return to the gold standard. He thought particularly that the Federal Reserve System would be induced to stop sterilizing gold, and would instead, as it has recently been doing, contribute to credit easement.

In other words, though he realized that there might be some temporary moderation of the business tempo, he was looking further ahead to a great renaissance of world-wide economic activity, and he was planning to take advantage of any recurrence of public pessimism to buy the shares of strong companies which seemed destined to benefit from such long-term prospects.

♦

THE SETBACK in the market does not discredit common stocks as long-term investments, in my opinion. But it does discredit the exaggeration of the value of the new investment philosophy. In my opinion, common stocks should not be held in an investment portfolio to the exclusion of everything else at all stages of the business cycle. The public until the recent setback was inclining too much to an all common stock investment program. Its investment diet had become unbalanced.

Accordingly, during the break, many found themselves without cash or its equivalent. On the other hand, the individual with a balanced diet, though owning some common stocks, also had cash reserves, short-term bonds, which are the equivalent of cash, long-term bonds, and preferred stock.

In fairness to Edgar Lawrence Smith, president of the Irving Investors Management Company and author of "Common Stocks as a Long-Term Investment," it should be recalled that Mr. Smith warned that "sound investment management takes economic factors into consideration in determining at any given time what proportion of a fund should be in equities represented by common stocks and what proportion should be in maturing obligations represented by bonds, and is vigilant to note changes in conditions which indicate a change in these proportions."



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★ • ★

When Stock Buyers Go on Strike

(Continued from page 45)

panicky. When they all simultaneously wish to draw out their deposits the bank is unable to pay.

"That is the psychology that prevailed in the stock market. The prime fault lay in the credit structure. There had been an undue eagerness to invest, and people tried to do business on a shoestring.

"They had speculated with margin accounts (putting up a third or less of the purchase price and borrowing the remainder through the broker) which were unsafe, hence when the bear raiders began their final drives of the last week in October, they caught thousands of small holders who had to sell at a sacrifice. After the general level had been reduced, a new crop of forced sales was harvested, and then, with still lower prices, the same thing happened over and over again."

Sought help from bankers

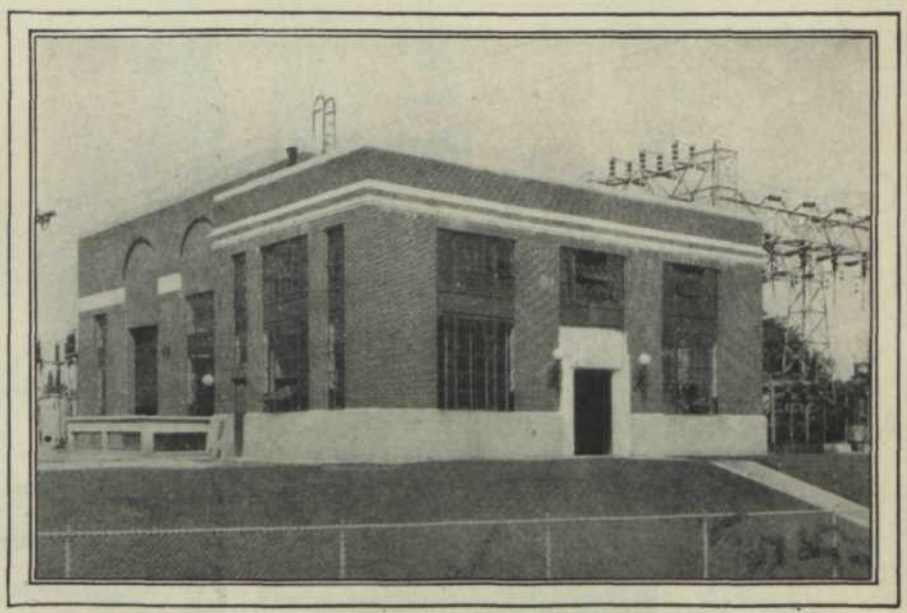
IN TIMES of crisis, groups instinctively turn to their natural leaders, and on Black Thursday pleas for help were rushed to the House of Morgan. Thomas W. Lamont, acting head of the House in the absence of J. P. Morgan, at once summoned the foremost commercial bankers of the city for a conference—George F. Baker, Jr., Charles E. Mitchell, Albert H. Wiggin, Seward Prosser and William C. Potter.

By noon, they had formed a consortium, which agreed to buy pivotal stocks for which there were no other buyers. They agreed to put bids in below the market so that liquidation could go on. Accordingly, they not only assured continuity at the market place, but also by making their intentions public temporarily turned the tide, and declining prices were momentarily checked. Before the gong was rung at 3 o'clock, prices had recovered sharply from the lowest level of the day.

The banking intervention steadied the market on Friday and Saturday, but by Monday the stream of uncompleted liquidation again flowed freely and reached its maximum violence and volume on Tuesday, when more than 16 million shares passed from sellers to buyers, a larger number than ever before in the entire history of the Stock Exchange.

Although the bankers' motive was to bring order out of chaos in the interest

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THE introduction of this rugged marble into the exterior permits your architect or engineer to plan a *finer* looking building, yet the cost of a small quantity of marble is negligible. The building shown is the East Point Sub-Station of the Georgia Power Co., I. Moscowitz, Architect.

Georgia Marble is practically impervious to moisture, therefore it is immune to the attacks of the elements. Address inquiry to any of our offices.

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1328 Broadway NEW YORK *814 Bona Allen Bldg.* ATLANTA *648 Builders' Bldg.* CHICAGO *622 Construction Industries Bldg.* DALLAS *1200 Keith Bldg.* CLEVELAND

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Sail on ships that serve your food...be serviced by stewards who speak your language . . . mingle with Americans who share your viewpoint. For the luxury of five day speed take the Leviathan, World's Largest Liner. Sails December 7 . . . so you can do Christmas shopping abroad. Sails again December 28 . . . that means a gala New Year's Eve on the Atlantic. Sails January 18 . . . for the smart international season on the sunny Riviera. Or book your passage on these palatial but low-cost cabin liners . . . George Washington, America, Republic, President Harding or President Roosevelt. Sunny, glass-enclosed promenade decks for sports and hikes. Weekly sailings, too, on the five popular ships of the American Merchant Lines, New York to London direct, completing the cycle of service. To Europe? Cross comfortably, safely and economically . . . under the Stars and Stripes!

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of all, their technique was that of manipulation. The manipulation was fourfold in character. They sought to influence supply and demand by adding to the demand for stock. They sought to allay the panicky fears in the lay mind by setting a public example of sanity and courage, and through reassuring public statements. They sought to turn back the economic forces of destruction by enlisting moral and financial cooperation from wealthy individual outside capitalists, including John D. Rockefeller, Sr. and Jr. And they influenced the situation by cutting down marginal requirements on bank loans to brokers at the height of the panic and by increasing by 992 million dollars in a single week the loans of the New York banks to brokers, rapidly replacing the funds withdrawn from the loan market by frightened out-of-town banks and by corporations, investment trusts, wealthy individuals, and others who had been lending money.

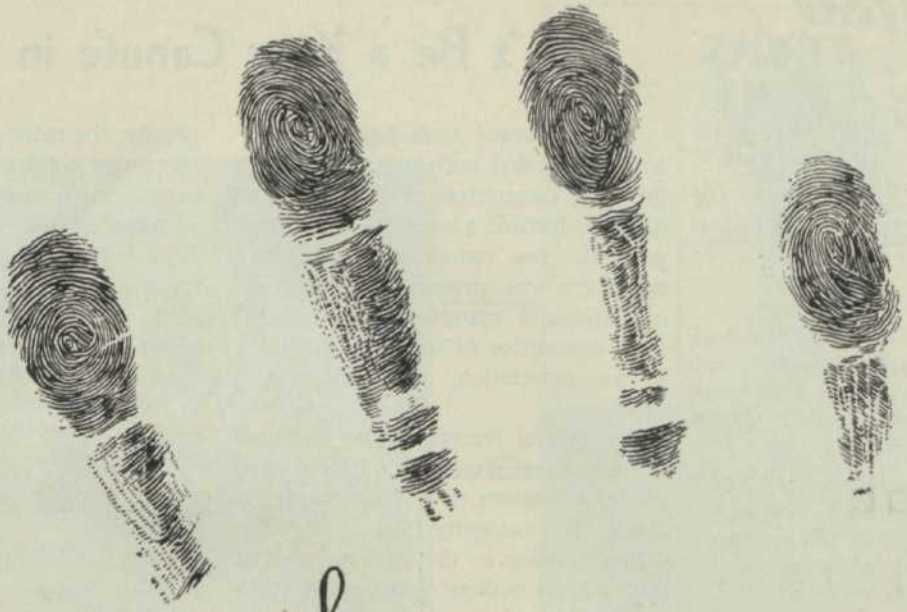
Short sellers encouraged

THE SUPPORT maneuver encouraged profit taking by short sellers who had been operating in the hopes of profiting from a decline. Such short sellers had previously sold at higher prices stock which they did not own. Instead of delivering their own stock to the buyers at 2:15 the next afternoon, in accordance with the rules of the Stock Exchange, they borrowed stock from a third party, and delivered the borrowed stock.

They induced the holder of the borrowed stock to accommodate them by advancing him a fuller cash loan against the stock than any bank would give. Accordingly, these pessimists, bears, or short sellers were on the lookout for an opportunity to rebuy the stock at lower prices, and repay with stock the person from whom they had borrowed certificates.

The bear wanted of course to buy back the stock as cheaply as possible, but when he saw that the bankers were supporting the market he got nervous and tended to join the buying forces, adding to the velocity of the upturn in prices. The extent of the decline suggested an inadequate short interest in the market.

Although they did brilliant and courageous work in turning back the destructive forces of passion and fears, the big bankers were roundly criticized. The shorn lambs, who had lost what they had staked, hated to see the so-called rescue forces buy up stocks below their value at prices which seemed destined to net them a handsome profit.



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WHEREVER it appears material is spoiled, money is wasted, time is lost! Nearly every manufacturer has at least one process in his production that is being done by slow, wasteful hand labor because no machine has ever been made to do the work.

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If you need a machine that has never been built, if there is some process in your production that is not as efficient as you would like it to be, we can help you. Send for the booklet describing the Services of Special Production Machines, how it operates and how it is serving manufacturers. Address Special Production Machines, Norfolk Downs, Mass.

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of the Scenic Southwest

« « **TODAY,** 117,000 residents bask daily in glorious sunshine, enjoying a superb year-'round climate at the spot from which early Spanish explorers found the lowest pass through the Rockies.

On six railway lines an average of 2500 passengers enter and leave El Paso each day . . . more than 1000 tourists stop nightly in El Paso's auto camps and 3000 hotel rooms are regularly filled.

« « **THROUGH** El Paso comes transcontinental rail-plane service. From here airlines radiate north, south, east and west. Ten important national highways center here.

Here, at the Gateway to Mexico, a city was incorporated in 1873, saw its first train in 1881. Strategically and geographically El Paso is the business center of a fast developing area . . . a city that has doubled in population every Federal census for three decades.

« « **EL PASO'S** trade territory produces two-fifths of the copper cattle, wool, and mohair found in the United States, while West Texas oil production is also reaching huge proportions. Because of these basic resources $25,000,000 has been expended here in new enterprises the past year.

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GIFT
12 Times
A Year

One year's subscription to
NATION'S BUSINESS

Don't Be a King Canute in Business

(*Continued from page* 24)

scale negotiated and jointly signed by the wage committees of the union and the manufacturer's association. The next year, the few remaining hand plants signed the scale presented by the union as individual manufacturers, and the wage committee of the manufacturers, as an association, never functioned again.

The official records of the National Window Glass Workers for 1924 showed that organization to be hurrying to its death. Its authority was gone. The plants opening in the autumn of that year did so without a universal scale. In the annual negotiations the wage committees failed to agree, and the scale was submitted to the manufacturers for their individual acceptance. Private agreements crept in, for the union was no longer in a position to enforce its former disciplinary measures.

Its troubles increased in other directions. The old hand plants were rapidly passing, unemployment among the hand glass blowers increased to a distressing extent, and members made heavy drains on the union's exchequer for financial relief such as had been granted to meet the unemployment and wage reduction crisis of 1921.

Loans that became gifts

AT that time the union had granted $50 as an emergency loan to every member who asked it. But what began as a loan was later, as directed by a referendum vote, converted into a gift. This meant that $216,000, almost exactly a half of the union's treasury, as accumulated dues, was refunded to the membership. The union was not financially able to repeat this generous act in 1924, when the unemployed again applied for money grants, and its officials became unpopular for frankly confessing as much.

In that year members of the union executive board resigned as officers and even as members of the union, that they themselves might take employment in the machine factories. Further decay of the organization stood revealed in the annual audit, which showed that during the fiscal year more than half the annual income had been paid to satisfy death claims.

On the other hand, throughout this steady decline of the hand industry and the rise of the mechanical sheet drawing process, the more progressive element in the union continued to agitate for the expansion to meet this mechanical expansion of the industry. Finally, in 1927, realizing that the old hand industry was gone forever, the rank and file of the National Window Glass Workers voted to call a convention, the first, and the last, ever held by the organization. It met in Cleveland, and took two decisive steps.

A final effort planned

IT ruled that members might accept work in machine plants and still retain membership in the union, and it decided upon a sweeping organization campaign within the machine plants. Since the hand industry and its skill were gone, it still would extend union control over the less skilled elements in the mechanized industry. A fund of $10,000 was appropriated to extend the union and the convention agreed that if within a year the effort to organize the sheet machine plants failed to reestablish the National Window Glass Workers to their old power, the organization would voluntarily disband.

To begin with, the organization campaign concentrated on the Libbey-Owens plants in Clarksville, W. Va. But the organizers met first with indifference among the workers, and next with strong opposition from the management, whose unskilled workers were employed under individual contracts. The attempt was abandoned. In 1928, the executive board of the National Window Glass Workers met and, after declaring the situation hopeless and the organization campaign a failure, formally disbanded the union. Its business and financial affairs were closed and the money remaining in the treasury after all obligations were satisfied, was distributed among the 879 members still in good standing at the time of the dissolution.

By way of benediction, the last president of the union, after quoting a United States Consular report to the effect that "it is clear that the great Belgian industry of hand-blown glass is a thing of the past," made the point that the marked difference in the development of the industry in Belgium and in the United States was in the attitude of the organized workmen.

For once the American worker had failed to foresee and fall in with the



February 2nd, 1929
First steel erected



June 10th, 1929
17,000 tons of steel erected and 75% of exterior masonry in place in 87 working days.

LINCOLN BUILDING, New York

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A new reverberatory plant in Arizona completed in nine months and four days—in the words of the client: "You have broken the best time record for the construction of any metallurgical plant in the southwest, on which we have figures, by practically five months."

A complete steel mill four months ahead of schedule, permitting the client to take advantage of an unusually favorable price situation four months earlier than expected.

The American Embassy at Rio de Janeiro completed 7 months after work began!

A complete produce terminal at Detroit—the finest of its kind in the world—built in 100 working days.

* * *

Speed like this makes new manufacturing facilities productive that much sooner, brings income from tenants in rented buildings at the earliest possible moment, reduces interest charges during construction, yields many other advantages to the client.

Speed involves no sacrifice of quality. Nor does it mean overloading the individual workman. Nor does it mean over-time or higher costs. Speed results when the construction organization knows how to coordinate its activities, keeping the flow of materials constantly ahead of requirements, anticipating every need, keeping all trades working smoothly, cooperating with the client's own production and engineering staff.

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plain trend of the times, where the Belgian union, almost as strong as the American, had recognized the inevitable and had changed in unison with progress from skilled craftsmanship to machine operation.

In consequence the Belgian organization had kept its proud position as a force in the industry. This point of view the American workers had steadfastly refused to adopt. In a word, Canute had commanded the tide to recede, and the tide had risen.

These final words of President Siemer, at the obsequies of the National Window Glass Workers, have some point:

"No human agency could have saved the hand craft. It was in the way of progress and it had to go. Human agencies could have saved the organization, but they chose not to do so, and the organization, too, passed into history. The mistake we made was in clinging to the old guild idea. That has no place in modern American industry."

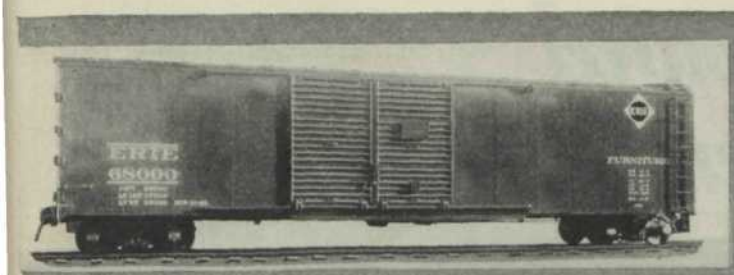
What is the moral of it all? How does this story of the window-glass workers concern us? I believe that in this age of general modern development of automatic machinery, we all face a situation like that to which this group of workers refused to submit. In one instance after another we note the invasion of a mechanism in some industry where the skill of the hand has always prevailed.

The moral of the tale

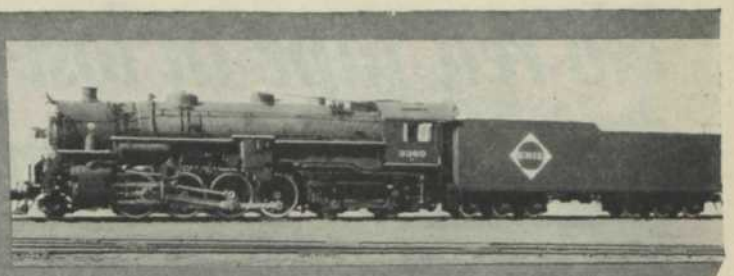
BY now this spread of machinery, and its consequences in the way of temporary unemployment have become known to us all. Yet this ever-increasing use of machinery to lighten and speed human tasks is likewise in the line of progress, a rising of the tide, against which it is idle to take a stand. The moral taught by these unwilling glass workers is that we must avoid their mistake and adjust ourselves to new conditions.

These glass makers, forced out of place by machinery, were not losing their lives; they lost only a type of work which they preferred to pursue. Their objection was against giving up one form of skill for another. It is the same in most cases where men are displaced from old occupations. They seem not to see that running the new machinery may lead to a new skill even greater than the old. So it may be in business. The man with a fondness for old and tried methods that are failing, refuses to see that in a newer and more scientific system he may find far greater enjoyment, coupled with vastly greater profits.

In the case of this rising tide of mechanization, it seems to me that we



New Freight Cars



More Locomotives



Additional Marine Equipment

The Price of Leadership

To keep abreast of constantly increasing demands and to maintain its splendid record for speed and dependability, the Erie Railroad System is this year spending over thirty-two million dollars.

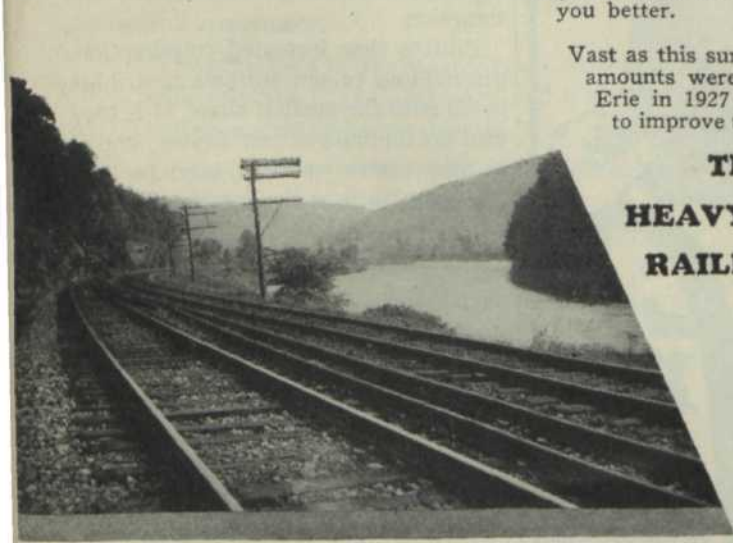
Twenty-five hundred new freight cars of various kinds will appear on Erie rails. There will be more of those great locomotives, the heaviest and fastest of their kind. In all, upwards of $10,000,000 will be invested in rolling stock.

For rails, ties, ballast and roadway more than $5,000,000 will be spent, and an equal amount will go for the elimination of grade crossings.

The remainder of this year's budget will be spent in many different ways in the six great industrial states served by the Erie. Piers and docks at New York will be enlarged and improved. Erie's marine fleet will be increased. All along the line from New York to Chicago improvements will be made with but one object in view: to enable Erie to serve you better.

Vast as this sum seems, similar amounts were spent by the Erie in 1927 and 1928, all to improve the service of

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Roadway Improvements



An Erie Pier

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find a two-fold duty, laid alike on the worker and on the country at large. The worker owes it to himself and to his family to adjust himself to this advance of machinery, even though it obliges him to acquire a new skill; and the country owes it to any worker thus displaced by machinery to help him to a new occupation, and to lighten his loss of wages and shorten his period of waiting until the new job is found. I note that employers are shifting to this new attitude. They are beginning to think first of the men to be displaced, before installing the machinery that is to displace them. In a word, we are even now adjusting ourselves to the rising tide.

After all, this case of the glass blowers is an isolated instance. I do not fear this increasing spread of machinery. On the contrary I have every faith in the ability of our people, and our workers especially, to adapt themselves to new conditions as rapidly as they are created.

The one thing I do fear is that this new machinery, which enlarges production and calls for less human effort, may tempt our employers to reduce wages. But any employer so tempted must realize that he, too, then faces a rising tide which he cannot defy without risk.

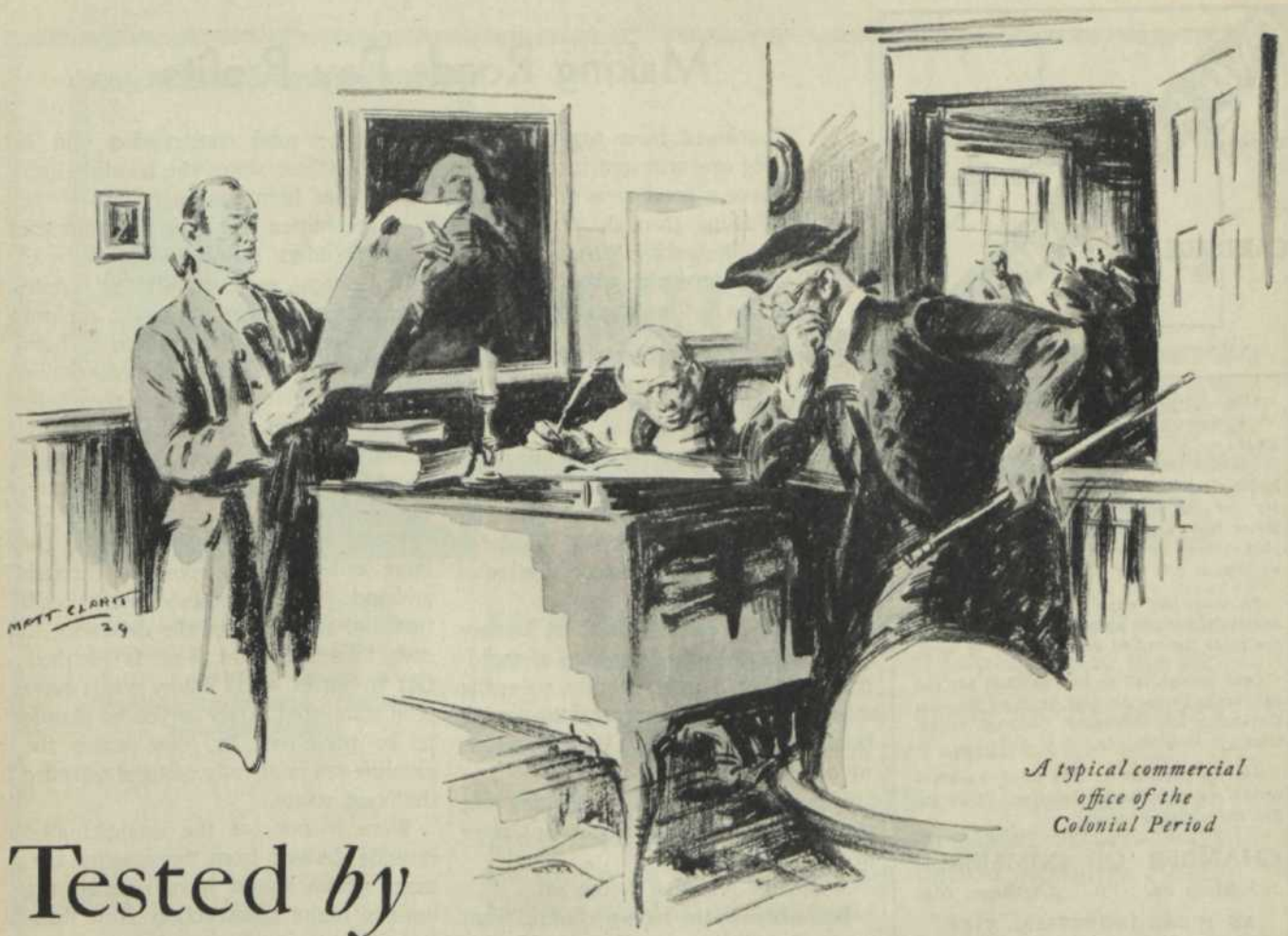
That tide is the general conviction, especially prevalent among our workers, that the worker is entitled to share in this new means of enlarging wealth, each in his just degree. I believe the employer who thinks to combat that tide courts failure. He is planting himself directly across the path of every principle of sound business. For we gain nothing with increased mass production unless there goes with it increased mass consumption.

And to that increased consumption, the millions of our workers contribute by all odds the greatest share. It is they who do the bulk of our buying, and it is they whom we most need to keep fully employed at the maximum wage.

Two Banker Brothers

TWO brothers, of my acquaintance, both bankers, serve on various boards of directors and take part in various public enterprises. One is always busy, while the other never seems to have anything to do.

Yet the latter has more business achievements to his credit than his brother has. My guess is that he is the lazier of the two and therefore has developed schemes for having subordinates do his work for him.—F. C. K.



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An interesting and informative booklet on mutual casualty insurance will be sent on request. No solicitation will follow. Address Mutual Insurance, Room 2201, 180 North Michigan Avenue, Chicago, Illinois.

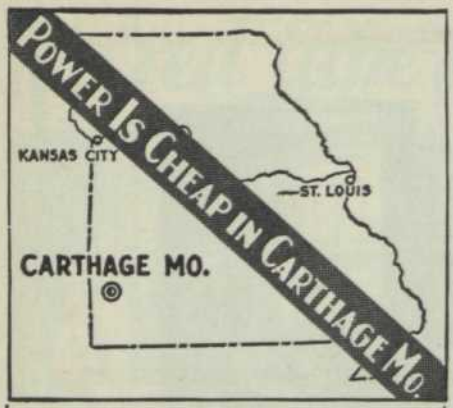
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Automobile (all forms)	*Plate Glass*
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OAKITE
Industrial Cleaning Materials and Methods

Making Roads Pay Profits

(Continued from page 42)

poles. They are arranged in clusters so that we have a good view of the countryside. Passing through a village we note that intersecting streets are protected with automatic gates and there is an absence of the delays that used to bother people ten years ago.

Freight train on a highway

A LIGHT farm truck is unloading into a long-distance six-wheel freighter which has stopped at a pickup yard owned by the farmers' cooperative. We wonder if the truck is owned by the cooperative or by a private line.

Toward the end of our short journey of 60 miles we pass long lines of rapid-transit freight trucks. Finally, we swing into the short driveway of the eating house of the state-owned park for which we are headed.

Here we dine in peace looking out over green grass with a pleasant river in the distance.

A dream? No. Just a forecast.

But where is the money coming from to pay for all this expensive road building? That is probably the biggest question to be solved in connection with highways both city and country.

Addressing the American Association of State Highway Officials as its president, Frank T. Sheets, chief engineer of the Illinois Highway Department, said:

"Antiquated, yet most recently modern, ideas of finance and design must be junked, and only seemingly bold and daring designs coupled with unprecedented expenditures will provide any permanency of solution."

Up to recent months, the various states have voted $1,400,000,000 in bonds for road construction and in many of these states the bonding limit almost has been reached.

A committee report of the American Road Builders' Association made by C. M. Upham, secretary-director, states that in regions that are in the preliminary stages of road construction, bond issues are a desirable and economical method of financing because they defer payment and do not make the tax excessive while the roads help to build up the region and make the final payment easier.

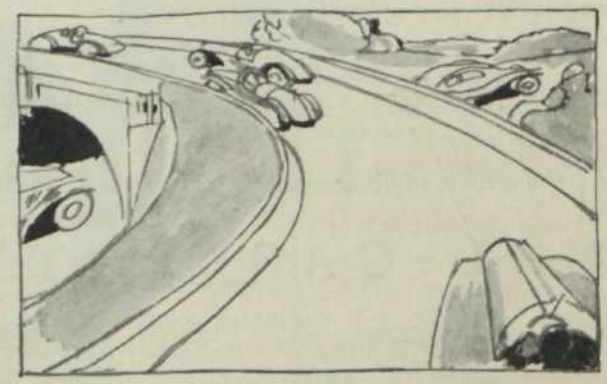
If the immediate construction of the large mileage made possible through a bond issue accommodates enough traffic to save or earn the difference in cost, then the bond issue is justified. But in states where many roads have been completed, a pay-as-you-go plan is to be preferred. In some states the gasoline tax is already pledged to retire the bond issues.

Were it not for the unanticipated revenue derived from the gasoline tax, many states would have reached the limit of major construction. Now these states are trying to increase the gasoline tax to provide additional funds.

Division of funds sought

THIS effort has been met, in some cases, by the demand that the funds from this tax be divided so that the counties, which generally have control of the secondary roads, and the cities, which usually pay the bulk of the tax, may have a share in the proceeds.

There is grave danger that the gasoline tax fund which now amounts to some 300 million dollars annually will be split up. Many hold that the state



The future will bring grade separations at intersections, increasing safety on highways



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There's no fire so good, it cannot be made better with a sprinkling of Fyrewell - specially prepared small size Reading Anthracite. Order a few tons today.

For seven years a society of distinguished scientists have been studying the effect of impurities in the air.

Each year they learn more of the harmful effects of smoke and dust on health and wealth.

Each year movements to abate the smoke evil have grown stronger. Each year increasing efforts must be made as the tide of population steadily flows toward congested centers.

Merchandise stocks are damaged; laundry costs, wear and tear increase for individuals; buildings deteriorate; parks are blemished; health is injured; all by the preventable nuisance of smoke.

While larger heating plants can eliminate smoke by improved methods, the easiest, most economical way for house owners and small heating plant operators to prevent smoke is to burn a fuel like Famous Reading Anthracite—the better Pennsylvania hard coal.

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President

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Time and again, this phrase appears in newspaper accounts of fires. It is something for every employer to think about.

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highway departments, which in general have functioned satisfactorily, should administer this money and apportion it in accordance to the motor vehicle registration in various parts of each state. The thinly settled sections protest against this procedure because they would then lose many of the fine roads that are now being built for them at low local costs.

In the final analysis, any road that does not carry sufficient traffic to make it profitable to the community is a burden on the community, just as are jails and schools, and the funds for such an improvement should come, in part at least, from general taxes.

There are also certain benefits to the public from a system of improved roads, such as real estate appreciation in value, added ease of communication which makes for more effective buying, not to mention the recreational features that such a system offers.

Where a use tax or toll, such as the gasoline tax, is imposed there is a widespread opinion that the expenditure should be strictly in accordance with the traffic requirements.

The development of the gasoline tax or toll idea has led a number of states to charge tolls on state-owned bridges. Bonds are issued with the bridge as a security and sold at a lower rate of interest than would be possible were the bonds issued on a private enterprise. Tolls are charged until the bonds are paid off when the bridge is made free. The same plan has been proposed for toll roads and provides a means of financing that has possibilities limited only by the number of profitable roads that can be located.

Toll roads a possibility

A TOLL road is not open to the criticism that money is spent on a road that the traveler does not frequent and, unless funds are forthcoming from general taxation, we may see a large development of publicly owned toll roads.

The privately owned toll road has two heavy handicaps—the high cost of borrowed money and the fact that the universal toll of the gasoline tax must be paid in addition to the toll to the private company. But as private toll roads develop it is possible they will be exempted or rebated for gasoline tax. At present, there is much agitation against toll roads on the ground that they restrict the "freedom of the road," whatever that is. There is nothing free about the gasoline tax.

There exists a four-fold system of



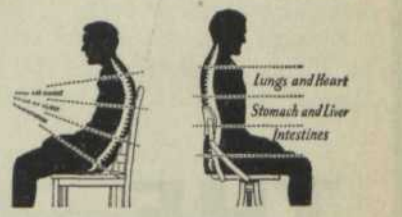
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This model, like all Do/Mores, is adjustable to the exact physical requirements of the occupant. It has been designed by leading physiologists to induce correct posture and thereby to conserve and build energy.

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transportation — highway, rail, water and air. This system must, of course, be coordinated properly to operate at highest efficiency—which it is not. But luckily practically all operation is in the hands of private enterprise; in water, highway, and perhaps air transport the government owns the roadbed. This independence of operation is the reason, perhaps, for the failure to provide adequate transfer facilities between the four systems.

Here is an opportunity for some cooperative development work. For example, there is no satisfactory reason why landing fields should not be built adjacent to and as a part of the highway system just as highways now serve the railroad freight and passenger stations.

T. H. MacDonald, chief of the U. S. Bureau of Public Roads, proposes that a National Transportation Board be formed to coordinate and regulate our four-way transportation system.

Buses and freight trucks

THE development of interconnected bus and highway freight lines is another cooperative task. In the case of passenger lines, this is being accomplished by consolidations so vast that now one can go from coast to coast on the same bus line.

The highway freight problem is different in that railway competition becomes stronger on all but a few commodities when the haul exceeds 100 miles. But the profitable radius of operation of freight trucks is extending gradually although growth will probably be slow and may be hampered by governmental regulation.

But where is this highway development leading us? I think we must look for the answer in the general prosperity and happiness of the country. While each of the four systems of transportation must, according to American business philosophy, pay its own way, the weaker parts of the system, taken as a whole, may reasonably expect some aid across the rough places. Aids of various kinds have been extended to rail, water, air and highway transport, but little aid has been given to them all as a group.

It is a problem that may be left to time to work out, or we may adopt the policy of getting them together each in defense of its own but all seeking the lowest common denominator of mutual profits through cooperation. This does not necessarily mean government regulation, but rather government encouragement.



SWIFT progress is being made in the successful adaptation of pressed metal to products of intricate shape and design. One after another, manufacturers using castings, forgings, wood and similar parts in odd shaped products, are switching to the use of pressed metal—radically lowering production costs and at the same time improving the appearance and salability of their products.

Through constant research, backed by 49 years experience in pressed metal work G. P. & F. engineers are finding ways to produce intricate products more economically for hundreds of manufacturers. In die making, too, G. P. & F. experience counts, both in original cost and quality of stampings. And the 15-acre G. P. & F. plant, with ultra modern equipment and 1500 skilled workmen, is assurance of economical production and prompt deliveries. Likewise, enormous raw material purchases guarantee low prices.

Submitting your present product, or blue prints of new ones contemplated, entails no obligation on your part. G. P. & F. engineers will gladly offer recommendations and quote prices.

This electric hair dryer case is an example of intricate shape and design. With such a product, stampings were essential because anything but stampings would have made the product too heavy to be practical.

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Am interested in winter trip to California.

Please send me "Golf in California" folder, "California Picture Book," and "Escorted All-Expense Tours."

When writing please mention Nation's Business

Will Chains Make Factories Their Slaves?

(Continued from page 30)

swered the questions raised no better than his other objections. To facilitate the debate, it may be assumed that the respective manufacturers know more about food products than does a newspaper.

On the other hand, it would seem the part of courtesy for the manufacturers to suppose for the time being that a newspaper knows news when it sees it. Indeed, the effect produced upon the minds, not to mention the nerves, of the sales managers justifies the judgment of the newspapers.

Apparently they did not know of these transactions before, and therefore they should have thanked the newspaper for informing them. They could not well be blamed for facts without their knowledge, but they could, and should, have been held accountable by their superiors for ignorance. On that score alone publication rendered a service.

In view of the facts reported, then, it seems more charitable to impute ignorance rather than disingenuousness to the sales managers. The merchants, on the other hand, have something to say in their own behalf.

Not unnaturally they declare that they must buy as cheaply as they can, wherever they can, whenever they can, and from whomever they can. If their competitors buy from chain stores cheaper than from the manufacturers, the other merchants feel that they must do the same thing or succumb to competition—an alternative which does not appeal to them.

Companions in dull business

THESE merchants believe, too, that in respect to one phase of the situation they know more about the work of the manufacturers' salesmen than the sales managers do. If what they report is true, they do. They say that the usual conversation between a salesman, for any one of the companies of which the products have appeared in the transactions recently reported, and a wholesale grocer who has taken part in them, runs about like this:

"Hello, Bill. How's business?"

"Good morning, Tom. Oh, about the same."

"Nothing doing in my line, I suppose, same as usual."

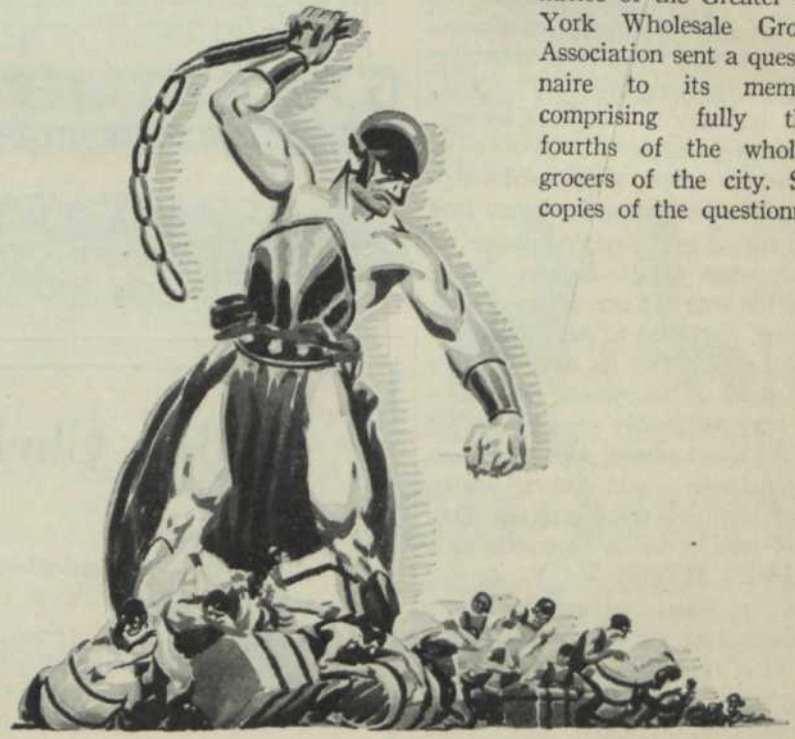
"No, nothing today, Tom."

"Same reason?"

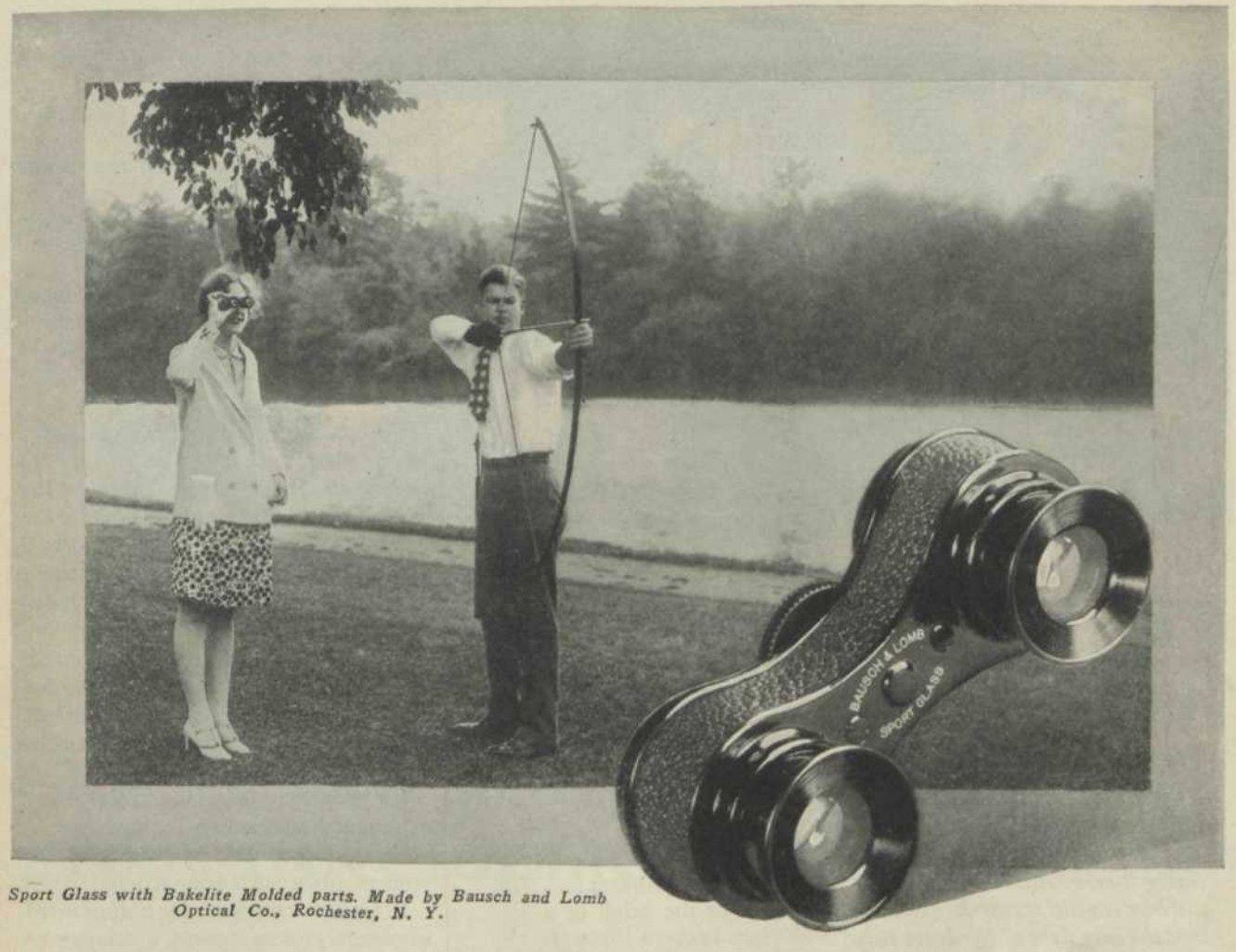
"Same reason."

"Well, I don't blame you, Bill. Better luck for me next time I see you, when times are better."

To learn the facts in the case a committee of the Greater New York Wholesale Grocers' Association sent a questionnaire to its members, comprising fully three-fourths of the wholesale grocers of the city. Sixty copies of the questionnaire



When the chains can dominate primary markets we will have a compelling invitation for the Government to step in and regulate the food industry



Sport Glass with Bakelite Molded parts. Made by Bausch and Lomb Optical Co., Rochester, N. Y.

Bakelite Molded was a "far-sighted" selection for Bausch and Lomb Sport Glass

Purchasers expect that fine binoculars, such as those produced by Bausch and Lomb, will retain their new appearance through years of service. Far-sighted policy dictated the selection of Bakelite Molded, a material of lasting color and lustre, for eye-piece cones and focusing knob.

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Hundreds of different instruments and devices have been improved in quality and appearance through the use of Bakelite Molded. Some of the industries which have benefited through the attractiveness, durability and economy of Bakelite Molded are the Optical, Radio, Electrical Appliances and Devises, Office Equipment, Clock, Novelty, and scores of others.

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A trip to Hawaii has incidental business values, too. Through the great Pacific Southwest to Los Angeles...center of western commercial development...and then over the delightful southern route to Honolulu, America's outpost of Pacific trade...is a tour through an empire it is well to know.

A Voyage That Ends All Too Soon... Wonderful meals...splendidly appointed staterooms...private or connecting bath...telephone near your bed...prompt, courteous personal service...gymnasium ...plunge...massage...barber...beauty specialist...manicure...every de luxe travel facility is at your command on LASSCO's luxury cruisers . . . "City of Los Angeles" and "City of Honolulu."

Six de luxe Sailings
From Jan. 2 to Feb. 22

LASSCO's increased sailing schedule, effective January 2, 1930 will provide three sailings each of the palatial cruisers "City of Los Angeles" and "City of Honolulu" between January 2 and February 22. In addition there will be frequent sailings of LASSCO's other splendidly serviced ships.

With each year, Hawaii becomes increasingly popular as one of society's favored winter rendezvous. An early booking is advisable to assure you a wide selection of accommodations. For reservations and full particulars, apply any authorized agent or—

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were issued and 18 replies were received within a few days. Some of the questions and answers follow:

Have you bought goods from chain stores? Eighteen, yes.

How were the goods paid for? Seven, by check; four, by cash.

Had a salesman called upon you to solicit your trade? Six, yes; three, no; one, phone.

What evidence have you of such transactions, in the form of invoices, memorandum orders, delivery slips, checks or anything else? Three, invoices; one, slip; six, checks; one, none.

After consultation with Felix H. Levy, of the New York bar, who was special assistant to the Attorney General of the United States, and special counsel to the Department of Justice in connection with the Sherman Law proceedings brought by the Government against the tobacco trust, in the Roosevelt Administration, the wholesale grocers' committee recommended for the consideration of the Association these three courses of action:

1. Presentation of a complaint to the Federal Trade Commission.

2. An action by a wholesale grocer against a manufacturer for damages on account of injury to his business consequent upon such transactions.

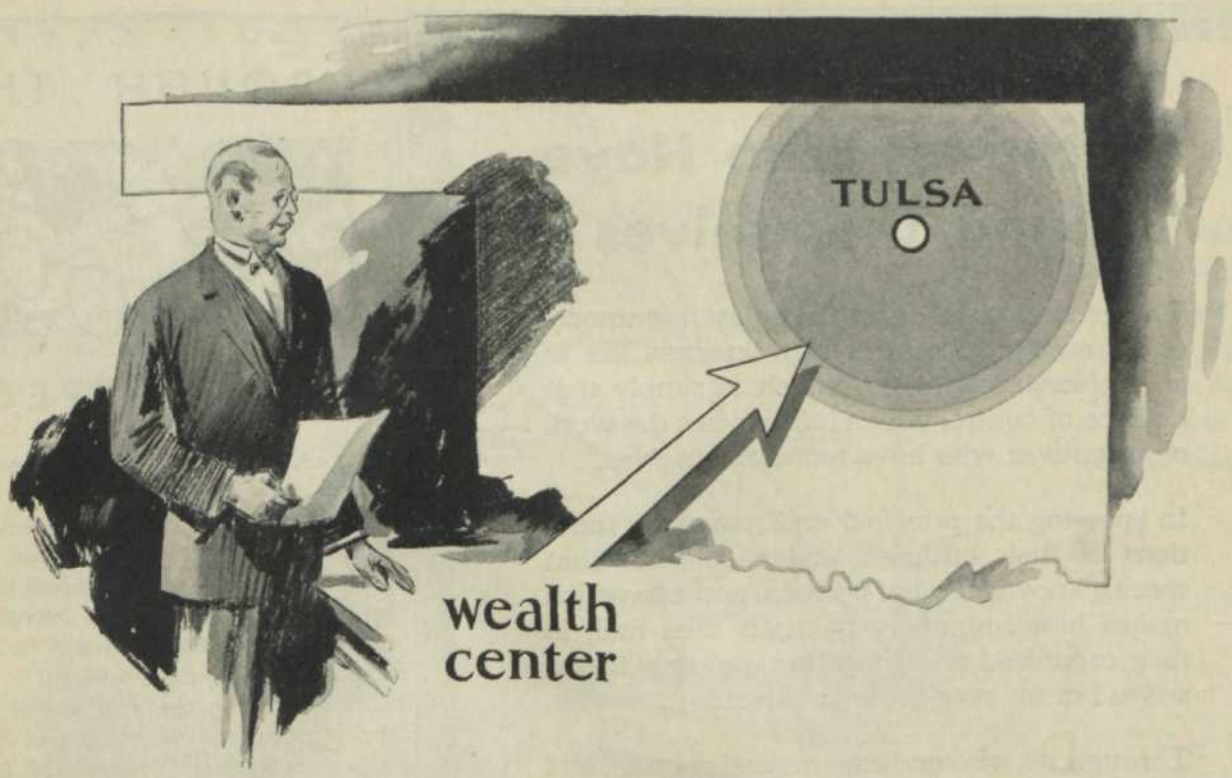
3. One or more suits by a number of wholesale grocers against a number of manufacturers in which all possible legal ramifications of such transactions could be presented to the courts for adjudication.

Will chains replace producers?

BUT the outcome of proceedings by the Federal Trade Commission or by the Department of Justice or the result of a lawsuit is almost insignificant in comparison with the economic aspects. If chain store corporations can undersell manufacturers to any considerable extent, as they undoubtedly have retailers and to some degree wholesalers, then it is only a matter of time before they will displace manufacturers more effectively than they have merchants.

They can absorb manufacturing firms, subjugate them by taking their entire output, or eliminate them by making their products unprofitable by price cutting.

When they control a sufficient number of the products they sell and extend their sway over enough territory to depress prices in one locality while they raise them in another, so that they can suppress competition and dominate primary markets, we will have, in the food industry a compelling invitation to government regulation.



"One of two states destined for great development," *Says Babson*

ROGER W. BABSON recently completed an exhaustive survey of the industrial possibilities of twenty Southern states, with the purpose of determining where industry will center, as its now definite southward trend progresses. The conclusion reached was that among the Southern states, *Oklahoma and one other state offer the greatest possibilities for future industrial development.*

"In arriving at this conclusion," he said, "we took into account four leading essentials to industrial development, which are: location, power, agriculture and living conditions. Oklahoma in my opinion offers a strategic location as a manufacturing and distributing center. Your power resources are almost unparalleled in the world today, and your agricultural possibilities are great. There are other states well supplied with power and almost equally well located for industrial development, but lacking in the breadbasket without which no permanent industrial foundation can be laid."

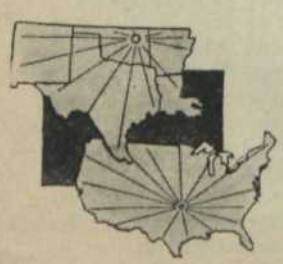
Mr. Babson's words confirm the message which Tulsa has been delivering to American industry. Oklahoma, with approximately 2% of the nation's area and 2% of its population, has *2.9%* of its agricultural production, or nearly 50% again more than her share—and *10.2%* of the nation's mineral production, or *five times* her share. Seventeenth state in area, she is one of only six states producing over a billion dollars worth of raw materials annually.

Tulsa is the wealth center and the industrial capital of this great state, for the territory within a ninety-mile radius of Tulsa, representing 33% of the state's area, *produces 59% of the state's raw material wealth.* This small area is the world's leading center of fuel production, accounting for 16% of the world's petroleum and 17% of the nation's natural gas, and containing most of Oklahoma's huge coal reserves of 79 billion tons. Tulsa offers every facility required by industry, and the Tulsa Industrial Finance Corporation is prepared to aid in financing industrial enterprises.

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THROUGH THE



EDITOR'S SPECS

A STAR REPORTER recently remarked that if the time ever came when he did not read his own stories first when his paper came off the press he would know he was getting old. Lack of interest in his own part of the job would, he felt, be proof that he was slowing up.

After reading the first copies off the press, editors of magazines turn with most interest to expressions from readers. Because these readers' letters interest editors, they are frequently reproduced. The custom is as old as journalism. If readers ever stop writing "Dear Mr. Editor" letters, they will make the job of bringing out a periodical more difficult, and the publication itself less inviting.

♦

M. H. AYLESWORTH'S "The Listener Rules Broadcasting" was not received in all sources with equanimity and the peace which passeth understanding. A few frankly did not like it. Others did. One who did not was Senator Couzens, of Michigan. He writes:

First, I desire to say that I am rather surprised that you should be engaged in propaganda work of this kind.

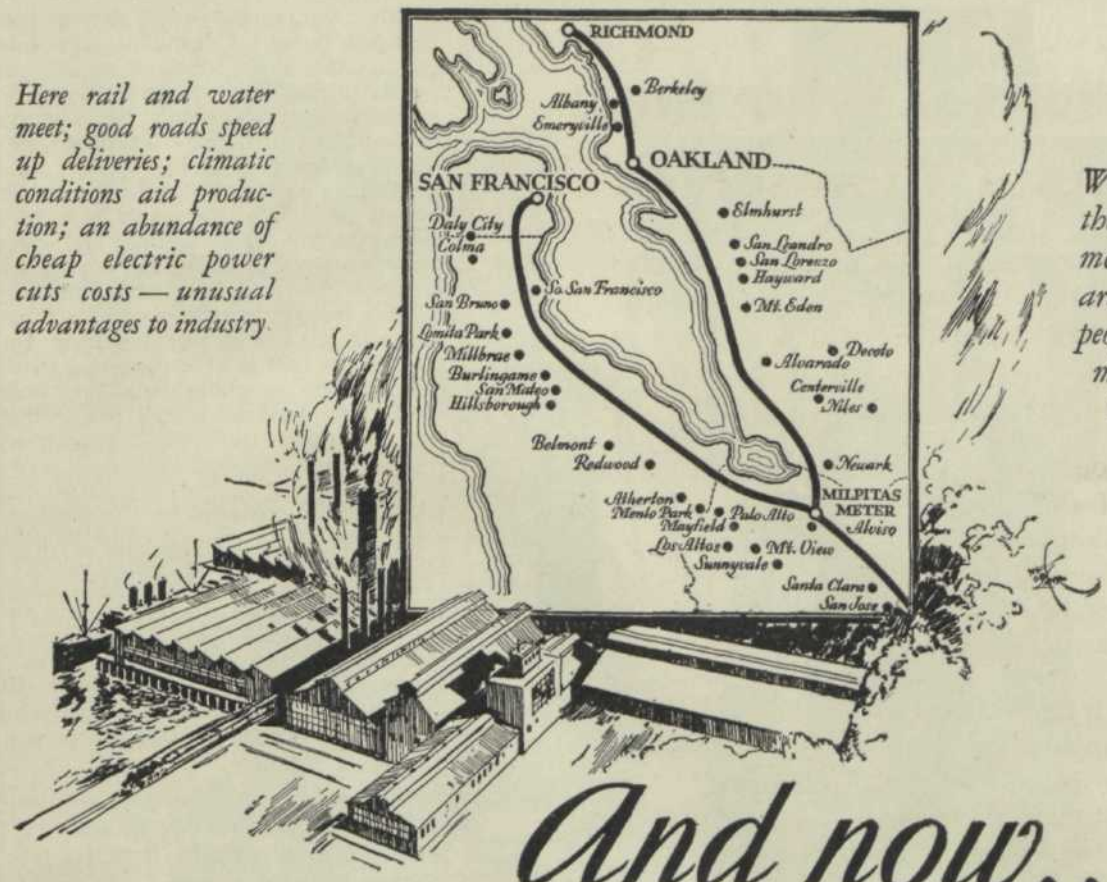
In the next place, I am not so sure that the "listener rules broadcasting." The reason he does not rule it is because it is almost impossible to get a composite view of what the listener likes or dislikes. Many listeners do not write letters; many turn off their radio when they do not like the program; many others grumble without making a record of it.

However, that is not the principal point I had in mind when I started this letter. The author makes some comparisons of the newspaper and broadcasting. He seems to overlook the fact that in reading a newspaper you can ignore the advertisements. You may read a newspaper for the news without reading a single advertisement. This is not true of broadcasting; you cannot shut off your radio when excessive advertising talk is given and yet have it on when the desirable features are broadcast.

Then again, nearly everyone knows that you get a newspaper for two or three cents because the difference in cost and

INVESTIGATE WHY OTHERS LOCATE HERE

Here rail and water meet; good roads speed up deliveries; climatic conditions aid production; an abundance of cheap electric power cuts costs — unusual advantages to industry



Within 40 miles of the San Francisco metropolitan bay area live 1,600,000 people—the largest market on the Pacific Coast.

And now.....

a supply of NATURAL GAS *to the San Francisco Bay area*

Natural gas is now available for industries in the San Francisco metropolitan bay area. The supply is available from the Buttonwillow and Kettleman Hills gas fields, said by eminent geologists to be the greatest gas fields in the world, capable of delivering 400,000,000 cubic feet of gas per day for a period of 75 years.

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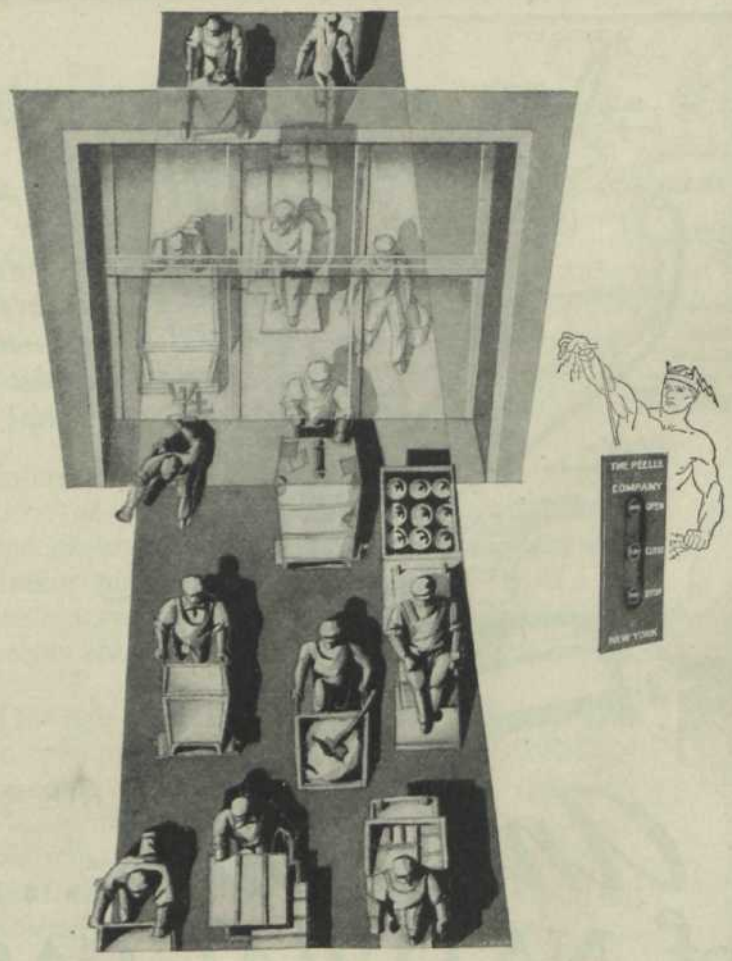
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United States Chamber of Commerce, Washington, D. C.

the price you pay is made up by the advertising.

Mr. Aylesworth's most glaring error is where he says, "Most of us are willing to accord to radio, which we get free, the same privileges as to publications, for which we pay." Certainly the American public is not so stupid as to think it gets anything free from radio.

The author would have been more accurate and his article would have been better received, I think, if he had stated how we pay for radio. He knows that radio is sustained to a large extent by license fees collected from manufacturers of radio sets and by the advertising. Yet, in spite of this, he tells us in this article that we get something free. You know it is pure bunkum to tell people they get something free.

♦

ANOTHER comment on the same article, also from Capitol Hill, is from Senator C. C. Dill. He writes:

Mr. Aylesworth's article is interesting and informative, but I think he overestimates the listener's power to prevent the evils of monopoly in radio. It is highly important that Congress keep a firm hand on the industry by legislation to prevent monopoly.

♦

A LETTER which speaks for itself with right vigorous prose is from Lancelot Sukert, Detroit architect.

Your recent circularizing of all the architects, including myself, for subscriptions to NATION'S BUSINESS, seems the height of audacity, in view of the article you carried in the September issue entitled "Give the Contractor a Chance," written by Thomas Thorpe Flagler, President of the Associated Contractors of America.

This article contains statements, or I should say misstatements, which no two-fisted architect can read without seeing red. When the general public reads such an article it can draw but one conclusion. The author very evidently intended to create in the reader's mind the idea that architects are incapable, unfair and unbusinesslike. It is unbelievable that your editor would permit such scathing criticism to go into print and it is likewise unbelievable that you should ask the architects to subscribe to your magazine while you publish an article roasting them unmercifully and unfairly.

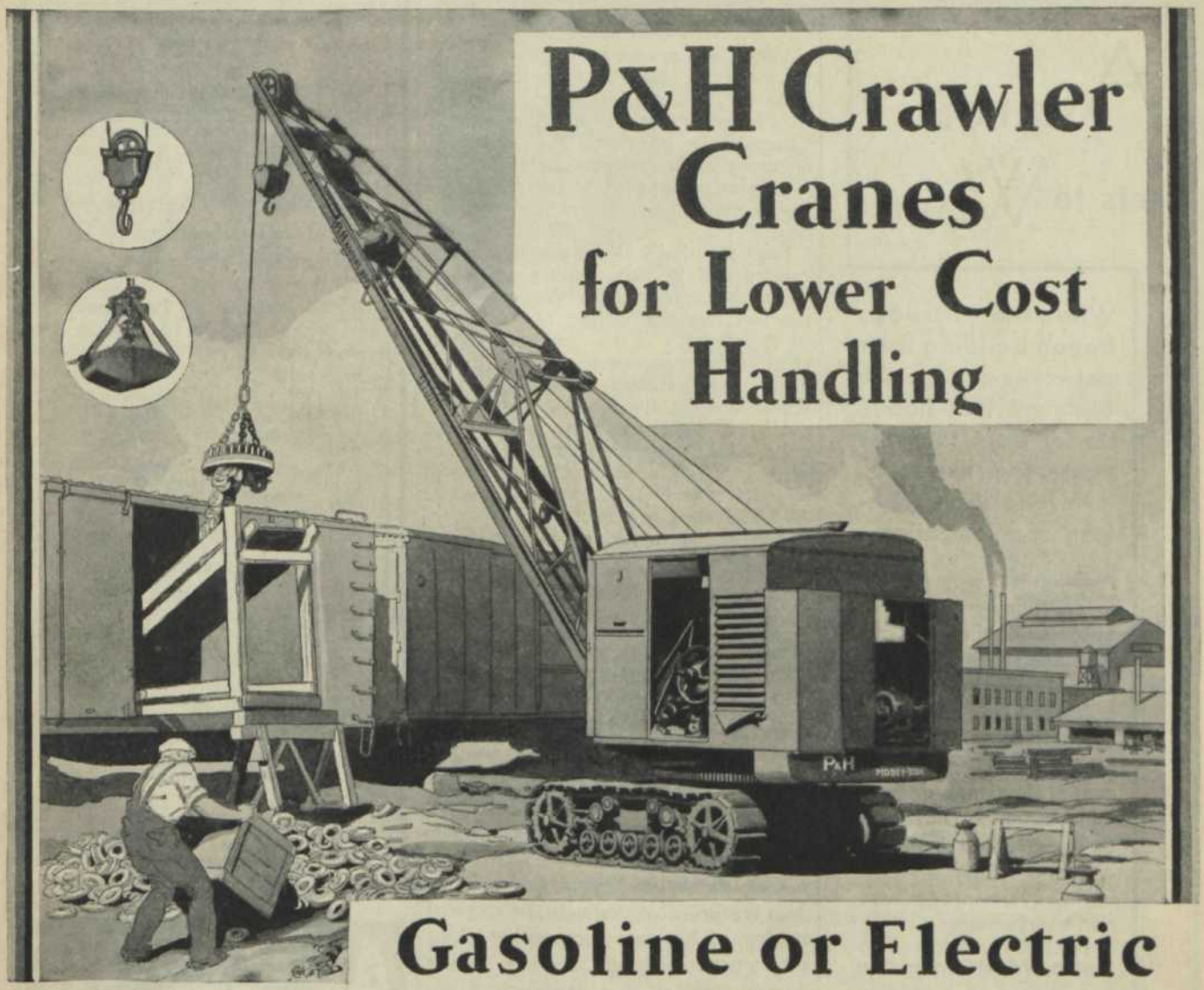
♦

IN THE same mail came a contrasting expression about the same article. E. J. Stephens of the A. E. Stephens Company, Building Constructors of Springfield, Mass., says:

We have all read the article and concluded that Mr. Flagler knows what he is talking about, as we have had experience with a number of the abuses mentioned therein. We wish every architect in the country would read every word of it.

♦

THE viewpoint of a fellow-editor is reflected in the following letter from E. R.



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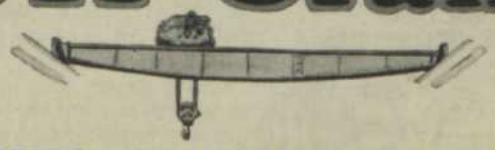
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AGENTS

Denmark, editor of the *Southern Architect and Building News*, Atlanta:

Permit me to express my appreciation for the article appearing in the September issue of NATION'S BUSINESS by Mr. T. T. Flagler, on "Give the Contractor a Chance!" In presenting this intelligent discussion of the problems of the construction industry to your 300,000 readers you have certainly done the industry a great service.

Since practically 75 per cent of building construction in this country originates within the architectural offices, and due to the fact that Mr. Flagler took occasion to direct much of his criticism to this great body of operators within the industry, I feel that in justice to the profession and for the good of the building public, it would be very much worth while to have presented in an early number of your excellent publication an answer by some one of our leading architects. As Mr. Flagler is a Southerner, I would personally like to see your author chosen from the profession in the South.

To a selected list of architects and builders went copies of Mr. Flagler's article. The staff wanted to know what these leaders thought of the presentation. Perhaps these men had already seen it in the magazine, but it was believed that in its reprinted form it would be more likely to draw comment of the type we are constantly seeking.

The office assistant who drew up the list of names included Mr. Flagler himself as one of the leaders, which he is. As a result of this oversight, he received a copy of his own composition along with a note which said, in effect, "What do you think of this article which appeared in NATION'S BUSINESS. Mr. Flagler wrote:

I received in today's mail your letter of October 4, asking me what I thought of my article, "Give the Contractor a Chance."

In reply would state that I think just as well of it as when I wrote it. It is the best and likewise, the only article I have ever written.

♦

A SELF-EXPLANATORY letter from a father of two sons and ex-Scoutmaster of Minneapolis raises an interesting point. Perhaps the very fact that we want to pass such a letter on to our readers is evidence that we are perfectly human and entirely open to suggestions and criticisms of our opinions:

Have read your editorial, "Advertising to One's Sons," in the September issue.

It seems to me that you have missed the big point.

In the first place, your manufacturer regrets that his sons are not as proud as he is of the work he is doing, a work of making things that are necessary to human comfort, and he thinks the lack of "money urge" should not affect them.

It is evident that your manufacturer's pride is in his achievement in building

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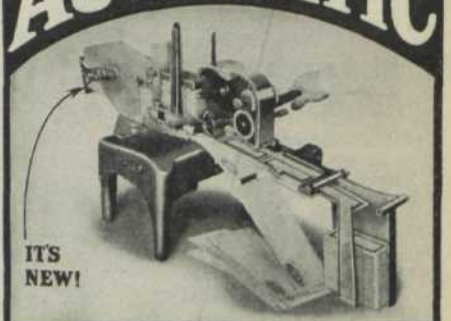
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Any article in this number of NATION'S BUSINESS will be reprinted for you upon request at actual cost to us.

up a big and profitable business, not in his contribution to the comfort of the human race. Else he would enlarge his plant and make the world more comfortable.

It is also evident that the "money urge" is and has been an important factor with him, for he does not enlarge his operations as he "already has an income more than ample to meet his needs."

The real trouble, surely, is that he has been too busy building up this business to take the time and pains to interest his sons in it. And, what is more important, he has in all likelihood failed, as nine out of ten fathers fail, to realize that before he can get his sons interested in what he is doing, he must really and sincerely become interested in what they are doing—not just as they are reaching manhood but from boyhood up, especially during the teens.

Until a boy reaches 12 years old, he depends on mother. Then, as physical changes begin he turns toward his father, *providing* his father meets him half way. Unfortunately, father is usually "too busy"—too much engrossed with his work in life, plus his golf, lodge and club. He provides for the physical needs of the son and leaves the rest to mother, the teacher, or what have you.

It is upon that deplorable fact that Boy Scouting is founded and why it is so successful.

Write an editorial on that.

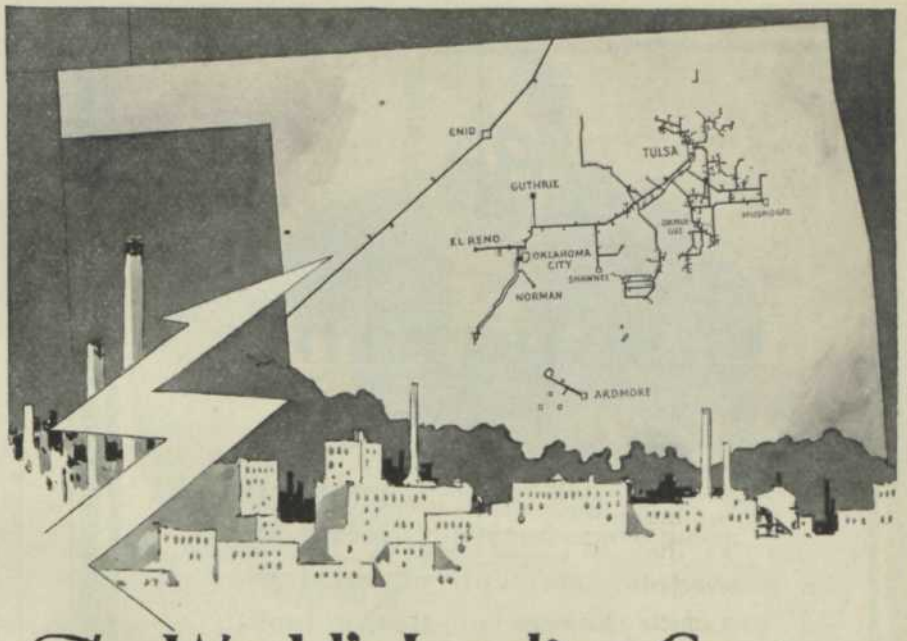
♦

GROCERY wholesalers and retailers in surprising numbers have written to John T. Jenkins, Washington grocer who contributed "If I Gave Way to Overselling" in NATION'S BUSINESS for October. In the main, they have commended his attitude of refusing free deals from manufacturers and wholesalers. A typical letter is from C. L. Porter, president of the Mayfield Company, wholesale grocers, of Tyler, Texas. Says Mr. Porter:

I have just had the pleasure of reading your article in October's NATION'S BUSINESS under the caption "If I Gave Way to Overselling."

I wish to make the statement that yours is the most sensible article along this line I have ever had the pleasure of reading. You are just right. The trouble with most retail grocers and some of us wholesalers, as well, is that we do not run our own business. We let the jobber's salesman and the manufacturer's salesman suggest to us what to buy, how much to buy, and how to sell it.

I maintain the only way to run our business successfully, is to run it ourselves and pay no attention to what other people are doing. I only wish every customer of Mayfield Company could read this article. I commend especially, your confining yourself to a small number of wholesalers. Scattering one's business often gets one in hot water, especially if his capital is limited, and he is sometimes compelled to ask favors of creditors, a small amount of money prorated among them does not satisfy anybody. Whereas, the same amount of money



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♦

"I was much interested in the article, 'Towns Have What Cities Promise,' by Thomas C. Powell, in NATION'S BUSINESS for September," writes E. W. McCullough, manager, Department of Manufacture, United States Chamber of Commerce. "In general," Mr. McCullough continues,

"what Mr. Powell says is most interesting and ought to warm the cockles of the small-town man's heart, for it contains much suggestive encouragement. To my Department, however, which is dealing with industrial extension as one of our major activities, without attempting to be at all critical, there are some statements which can hardly be borne out by facts. One in particular, in which he deals with 'Kilo-Man-Hours,' is fallacious. In fact, not at all true. But I assume that in some way he has gotten hold of a paper prepared by Mr. L. P. Alford, vice president of the Ronald Press Company, and Mr. J. E. Hannum, a mechanical engineer, on this subject, which came before a meeting of the Taylor Society in December, 1928, at which the writer had the privilege of being present.

"The meeting was quite largely attended, and at first opportunity an immediate attack was opened on the theorem presented by these engineers, and it was not long before the discussion (indulged in largely by engineers) pointed out very clearly that 'Kilo-Man-Hours' could not be a measuring stick applied to varied industries. In fact, the opposition was so effective that as far as I am informed the paper was never published nor carried any farther, the basis of their reasoning being considered erroneous.

"As Mr. Powell places so much emphasis on this new-found method of measuring production, I rather feel that some reference should be made to it by you, editorially or otherwise.

"There is another point on which Mr. Powell has overreached, and that is his assurance that there is a field for small plants in the smaller towns and cities, and while this is true in the production of restricted lines, such as specialties and accessories, it is absolutely not true in lines that lend themselves to mass production. In fact, the size of the plant that can be built and operated economically varies with the kinds of industries, and in our work of counseling or informing local chambers of commerce we have found it necessary to stress this quite strongly, for too many of them assume, because some of their older plants began in a very small way, that in bringing in industries the size of the plant is not important—when as a matter of fact it is highly so."

♦

AN appreciated comment on a regular feature of NATION'S BUSINESS comes from R. Roy Holden, Manufacturers Representative of Chicago. He writes:

No doubt a great many people like myself make a scrap book of the maps showing business conditions which you publish each month. These are quite valuable in watching where your business originates and if you are getting your share where business is good.

However, the latest form of "Last Month's" and a "Year Ago," one above the other, makes it hard to put them in a scrap book. The old form where they were side by side was much more convenient.

Statement of Ownership

STATEMENT of the Ownership, Management, Circulation, etc., required by the Act of Congress of August 24, 1912, of Nation's Business, published monthly at Washington, D. C., for October 1, 1929.

Note: Effective with the December 1929 number Nation's Business will be mailed from Greenwich, Connecticut.

City of Washington, District of Columbia, ss. Before me, a Notary Public in and for the State and County aforesaid, personally appeared Merle Thorpe, who, having been duly sworn according to law, deposes and says that he is the Editor of Nation's Business and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Chamber of Commerce of the United States, Washington, D. C.; Editor, Merle Thorpe, Washington, D. C.; Managing Editor, J. W. Bishop, Washington, D. C.; Business Manager, J. B. Wyckoff, Washington, D. C.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) Chamber of Commerce of the United States of America, said body being an incorporated organization under the laws of the District of Columbia, its activities being governed by a Board of Directors.

The officers are as follows:

President, William Butterworth, Chairman of Board, Deere & Company, Moline, Illinois. Vice Presidents: W. Rufus Abbott, President, Illinois Bell Telephone Co., 212 W. Washington St., Chicago; A. J. Brosseau, President, Mack Trucks, Inc., 25 Broadway, New York; Robert R. Ellis, Chairman of Board, The Van Vleet Ellis Corporation, Memphis, Tenn.; C. W. Lonsdale, President, Simonds-Shields-Lonsdale Grain Company, 900 Board of Trade Building, Kansas City, Mo.; Paul Shoup, President, Southern Pacific Company, San Francisco, Calif., Treasurer: John Joy Edson, Chairman of the Board, Washington Loan and Trust Company, Washington, D. C. Secretary: D. A. Skinner, U. S. Chamber of Commerce, Washington, D. C.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which the stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stocks, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is: (This information is required from daily publications only.)

MERLE THORPE.
Signature of Editor.

Sworn to and subscribed before me this fifth day of October, 1929.

(Seal) WALTER J. HARTLEY.
(My commission expires Sept. 10, 1932.)
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THIS is the nineteenth of a series of editorials written by leading advertising men on the general subject of «Advertising»

★

Advertising Must Begin In The Heart

A FRIEND and I were talking about two well-known enterprises. One had become rich through successfully marketing a specialty, using advertising as the backbone of its selling program. The other enterprise had spent as much money, but had made little headway, and the advertising had just been ordered discontinued. My friend summed it all up when he said, "Advertising is like religion. It cannot be taken vicariously and do much good. It must start in the advertiser's own heart."

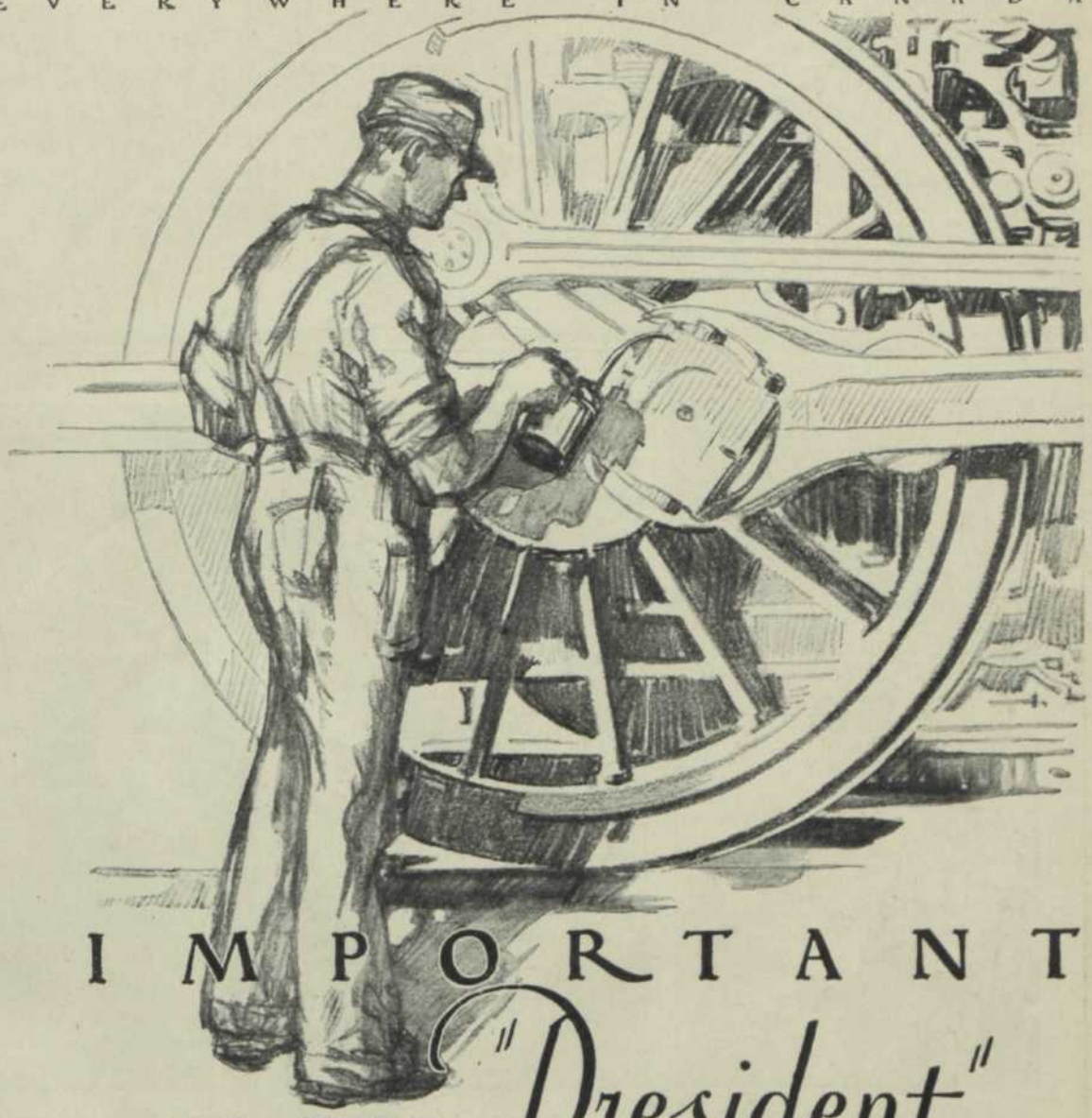
The successful advertiser was buying advertising space to tell a story he wanted to tell—a story to make people want and enjoy the benefits of his product. His advertising rang true. He settled quickly the amount of his advertising expenditures for the next year, and created confidence in his organization by the sureness of his procedure.

The other advertiser made his appropriation reluctantly—uncertainly—and was forever changing it as the tides of commerce flowed and ebbed, or as he thought they did. He really felt, in his heart, that such matters as sales forecasts, budgetary control, planned advertising and organized research for product development were the ideas of theorists. He advertised because the pressure of opinion surrounding him forced him to do so. But it was vicarious advertising. It didn't start in his heart.

Straight thinking and a sincere desire to swing the public viewpoint to one which the advertiser himself believes is right come as nearly to being the keystone of successful advertising as any two elements can.

JOSEPH R. GERBER, *Pres.*,
Joseph R. Gerber Company

TO EVERYWHERE IN CANADA



AS IMPORTANT AS THE "President"

"A messenger boy is as important in his sphere as I am in mine. The minute a single man slacks on the job a bolt begins to rattle."

SIR HENRY W. THORNTON,
CHAIRMAN AND PRESIDENT,
CANADIAN NATIONAL RAILWAYS

IT is not magnitude alone which makes Canadian National a truly great railway system. Neither is it perfection of equipment. It is something more rare—*character*. There are 108,000 men in the army of Canadian National employees and they possess one common characteristic—enthusiasm.

Among these 108,000 men one thought has been preached and practised and preached again—a messenger boy is as important in his work as the president in his: every man must do his job or the whole will falter.

An intangible thing, *esprit de corps*—but a mightier force than all the mammoth locomotives which take the Rockies in their stride. It has made Canadian National a great railway and a great institution, alive with enterprise and purpose, like the virile young nation of which today it is the nerve and sinew.

The Canadian National Railways System has over 23,000 miles of track, a chain of hotels, vacation resorts, steamships, a telegraph system, radio stations, an express service. It has the mightiest locomotives and the most luxurious equipment that men can build or money can buy. It spans a continent from east to west and links the Great Lakes to the shore of Hudson Bay. The largest railway system in America.

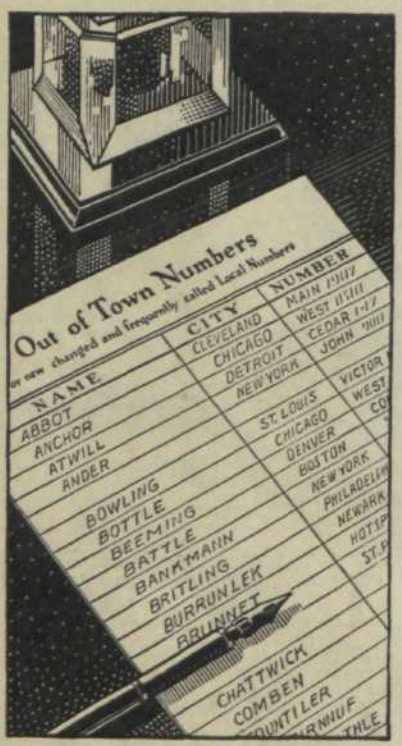
Radio reception on Canadian National trains today—telephone connection from moving trains to home and office perhaps tomorrow. The last word in steam locomotion today—new marvels of oil-electric locomotion on the horizon. Maximums of efficiency and luxury today—better, finer, greater things tomorrow. That is the product of enthusiasm. It is the character of a railway system in which messenger boy and president have the same unceasing urge to greater achievement.

CANADIAN NATIONAL

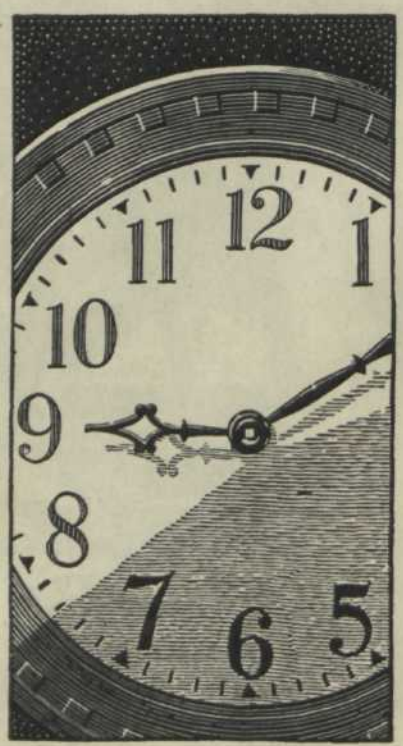
BOSTON 333 Washington St. · BUFFALO 420 Main St. · CHICAGO 4 S. Michigan Ave. · CINCINNATI 49 E. Fourth St. · CLEVELAND 925 Euclid Ave. · DETROIT 1523 Washington Blvd. · DULUTH 430 W. Superior St. · KANSAS CITY 705 Walnut St. · LOS ANGELES 607 So. Grand Ave. · MINNEAPOLIS 518 Second Ave. So. · NEW YORK 505 Fifth Ave. · PHILADELPHIA 1422 Chestnut St. · PITTSBURGH 355 Fifth Avenue · PORTLAND, ME. Grand Trunk Ry. Sta. · PORTLAND, ORE. 302 Yamhill St. · ST. LOUIS 314 No. Broadway · ST. PAUL 83 East Fifth Street · SAN FRANCISCO 689 Market St. · SEATTLE 1329 Fourth Avenue · WASHINGTON, D. C. 901-15th St., N. W.

THE LARGEST RAILWAY SYSTEM IN AMERICA

3 simple Suggestions for Telephoning between Cities



Call by number, whenever you can



Call during the less crowded hours of the business day



Speak distinctly and directly into the mouthpiece

Here are three simple suggestions that are almost sure to help you in getting the most out of your telephone calls between near and distant towns.

Call by number, whenever you can; it will save your time. It is useful to know the number, especially for calls that you may make frequently. "Information" will gladly give you the number of any person or concern you wish, so that you can make a note of it for the future. It is a convenience to your customers to print your own telephone number on your letterhead.

Make your calls when the men you want to reach are likely to be less busy. Try calling before 9.30 in the morning, between noon and 2, or shortly after 4.

Third, speak distinctly into the telephone, keeping your lips close to the mouthpiece. A natural speaking voice such as you use in talking to a man across your desk makes distant calls as clear as local calls.

Remembering these three points will make your telephone service easier and better than ever.

Inter-city calls are ideal for making appointments. Following up visits. Clearing away misunderstandings. Completing buying and selling transactions. Bell Telephone Service is *Convenient . . . Economical . . . Universal.*

BELL SYSTEM
AMERICAN TELEPHONE & TELEGRAPH CO. AND ASSOCIATED COMPANIES